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Imageability and the Acquisition of Verb Inflections: An Exploratory Study in ESL Context

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A R T I C L E I N F O

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A B S T R A C T

The study of the acquisition of inflections has been a significant area of academic exploration for quite some time. Most studies, however, provide insights into the acquisition pattern in L1 contexts. There are few studies dealing with L2 learners in contexts where the exposure to the target language occurs largely inside the classrooms. The significance of the present study is that it focuses on the acquisition trajectory of inflections in L2 contexts where exposure to the target language, here English is largely limited to classrooms. The study, therefore, can reliably comment on the impact of classroom direct teaching based on textbooks on the acquisition of verb inflections. The present study reports on the interaction between imageability, textbook frequency and acquisition of verb inflections in ESL context. The study finds that in ESL context unlike L1, textbook frequency more than imageability is a determinant in the acquisition of verb inflections.

1. Introduction and Literature Review

Morpheme acquisition has been an important field of academic investigation in acquisition studies for many years (Berko, 1958; Brown, 1973). Acquisition studies with morphemes focus on grammatical morphemes and consider them as independent of the lexical morphemes. The study by Brown (1973) on the acquisition of grammatical morphemes by young L1 English speakers accounts for the acquisition order on the basis of the difficulty levels of the grammatical morphemes as independent units. In another morpheme acquisition study, de Villiers and de Villiers (1973) focus on the semantic and syntactic complexity of the inflections to account for their ease or difficulty of acquisition by adult L1 English speakers. Morpheme acquisition studies with L2 English speakers (Dulay & Burt, 1974) also exclusively focus on the inflections as independent of the words or lexical morphemes they are bound with.

In recent times, acquisition studies (Cohen-Shikora, Balota, Kapuria & Yap. 2013; Smolík & Kříž, 2015) focus on the contribution of lexical morphemes to the acquisition of grammatical morphemes. This paradigm shift is due to the assumption that grammatical morphemes are always used with lexical morphemes and inflections are acquired as inflected forms of stems rather than as independent units. Therefore, semantic complexity of lexical morphemes or stems may contribute to the acquisition of the inflected forms. One of the factors affecting the semantic complexity of stems is the construct of imageability. Imageability refers to a word's ability to form a mental image. The more readily a word draws a picture in mind the more imageable is the word. Therefore, the noun *ball* is more imageable than the noun *dream* or the verb *kick* is more imageable than the verb *think.* According to studies (Hansen, 2017), imageability is a significant

determinant in lexical acquisition. More imageable verbs are learned earlier and more easily. Imageability predicts the acquisition of not only verbs but also verb inflections. It has been observed in studies (Prado & Ullman, 2009; Smolík & Kříž, 2015) that inflected forms of more imageable stems appear earlier in early vocabularies.

In their study, Prado and Ullman (2009) report that L1 English speaking adults produce the irregular past tense forms of verbs with high imageability more readily and easily. The findings of the study were confined to the irregular inflected forms of verbs because it was assumed that imageability effects are more prominent on the storage and retrieval of irregular forms rather than on the regular forms which are constructed through rule-governed morphological processes.

In later studies, however, it is established that the effects of imageability can be extended to regular inflected forms as well. Cohen-Shikora et al. (2013) report that imageability can affect the morphological processing of the inflected forms of the regular verb stems. In a more recent study, Smolík and Kříž (2015) report the effects of imageability on inflected forms of not only verbs but also nouns.

These studies discussed above bear implications on the understanding of the acquisition of grammatical morphemes and generate interest to investigate their acquisition patterns in L2 contexts. Our study tries to investigate and understand how the verb stems and inflected forms of verbs are produced by young L2 English learners in Indian ESL context and to what extent, imageability serves as a variable in comparison with the other variable like textbook frequency.

2. The Present Study

As discussed above, various studies show that imageability of lexical morphemes influences the processing and acquisition of inflectional morphemes. It is easier for young learners and adults alike to acquire the inflected forms of more imageable stems. All these studies however deal with L1 speakers, and the acquisition trajectory of L1 and L2 speakers differ (Dulay & Burt, 1974) greatly. The present study aims at exploring the contribution of stem imageability to the acquisition of inflected forms of verbs by ESL learners. Another significant variance in the contexts between L1 and L2 acquisition is the ESL learners' limited exposure to the target language. In L1 context, a lot of lexical acquisition occurs through incidental learning. The scope of incidental learning is limited in L2 context and vocabulary learning primarily occurs through direct teaching of textbook materials. Textbook frequency of words is also an important determinant in the acquisition of words. Given the heterogeneous nature of ESL classroom, the proficiency level of ESL learners varies much more than that of L1 learners. ESL learners' proficiency level directly influences lexical acquisition. Learners with higher level of proficiency are supposed to produce more difficult inflected forms, which, in our case, are inflected forms of less imageable stems. In this study, we, therefore, seek to explore

i. If ESL learners like L1 speakers learn and produce inflected forms of more imageable verbs with greater ease.

ii. If more proficient ESL learners produce more inflected forms of less imageable stems.

ii. If textbook frequency has any role in the acquisition of inflected verb forms.

2.1 The Subjects

The subjects (N 37) of the study are selected from the 7th-standard students in the age group between 13;0 and 14;0 from a government-aided Bengali-medium higher secondary school, located in north Kolkata. There are twenty-five male and twelve female subjects. The subjects' profile already collected as part of the pilot shows that the subjects are from the middle class to low-middle class background. The average parental academic qualification is found to be in the range from moderate to very low. Though the subjects start learning English as a school subject from 1st grade at the age of 6; 0, they are deprived of home-based support, which plays a critical role in second language development. It can be said that the subjects' learning of English is limited to the formal school context. It is the input in the classroom and the textbooks that largely determine the subjects' proficiency in English as L2 and this has been confirmed in our pilot as well as in the main study.

It has been decided to pitch the study at the 7th standard of a Bengali-medium school. English is now taught from the 1st standard in all Bengali-medium schools, and it has been decided that those six years of exposure to English as L2 should be adequate to elicit comprehensible and study-worthy data from the subjects. The basis of this decision is grounded in leading L1 research studies (McBride-Chang, Wagner, Muse, Chow & Shu, 2005), where the kindergarteners whose average age is between 3;0 and 5;0 are used to elicit data to study morphological and vocabulary knowledge. Being native speakers of English, this means that they have had three to five years of exposure to English as a home language. By this time children master adult-like proficiency in grammar of L1 and adequate vocabulary for basic communication, "The average six year old will understand about 14,000 words and have at least 6,000 words in their spoken vocabulary." (Peccei, 2006). The subjects of our study have had 6 to 7years of exposure to English in a school environment with a formal instructional intervention. The textbook analysis, in addition, shows that their level of exposure to the lexical items, namely nouns and verbs is considerable and useful data for the study of lexical development can be elicited from them.

3. The Research Design

The aim of our study is to examine the acquisition of verb inflections in ESL context. For this study it is decided to elicit narrative data from the subjects. The narrative data has been very useful to study lexical development of L1 and L2 learners. The Narrative data can be elicited following different approaches and methods.

There are three basic methods to collect narrative data- naturalistic, seminaturalistic and direct elicitation (Ely, Wolf, McCabe & Melzi, 2000). For our study, we opted for the direct elicitation technique. In direct elicitation technique, the researcher explicitly asks the subject to tell a story by providing a prompt or stimulus. The structure and content of narrative derived in this process can provide significant information about the underlying cognitive, social and affective processes of subjects. There are a number of techniques for direct elicitation-- story retellings, film and video retellings and wordless picture books. Studying carefully the methods in terms of time and labour consumption and also the recorded data-to-transcribed yield ratio, it is decided to opt for the direct elicitation method through story writing to collect the narrative data in our study. It is also decided that for the elicitation of written data a wordless picture book would be used because it has been used as standard stimuli in multiple L1 and L2 studies (Berman & Slobin,

1994). For the direct elicitation of data, the tool used in this study is the Wordless Picture Book, *Frog, Where Are You?* (Mayer, 1969).

The book mentioned above was used in the free writing task for data elicitation. The book contains twenty-four pictures. The pictures tell the story of a boy and his journey along with his pet dog in search of a lost frog. The selected pictures will give some idea about the nature of the book.

Figure 1: Pictures above show the boy and the dog looking for the frog

Figure 2: Pictures above show the boy and the dog coming to a forest in search of the lost frog

The pictures were used for the free writing task which was administered to the subjects. Each subject was given a set of pictures and two pages (A4 size). There was no time limit. The subjects were given as much time as they needed. However, the starting time was noted and the completion time for each subject was also noted on his answer script. It was noted that most subjects took between 1hr 30 min and 2 hrs to complete the story writing task.

3.1 *Categorisation of Learners' Proficiency*

Since one of the aims of the study is to explore how ESL learners' proficiency level interacts with imageability in the acquisition of the inflected forms of verbs, the subjects' proficiency level was decided on the basis of measuring lexical diversity (LD). Lexical diversity represents the breadth or range of vocabulary and it is a reliable predictor of language proficiency and D is the most robust measure of LD (Yu, 2010). We used 'Text Inspector', an online professional tool that gives D scores of the subjects and on the basis of the scores we divided the subjects into three groups. Low Lexical Diversity (LLD) group with the lowest level of proficiency, High

Lexical Diversity (HLD) group with the highest level of proficiency and the Intermediate Lexical (ILD) group with a proficiency level between the lowest and the highest margin. The average LD score for HLD is 26, the average LD score in ILD is 17.1 and the average LD score in LLD is 7.4.
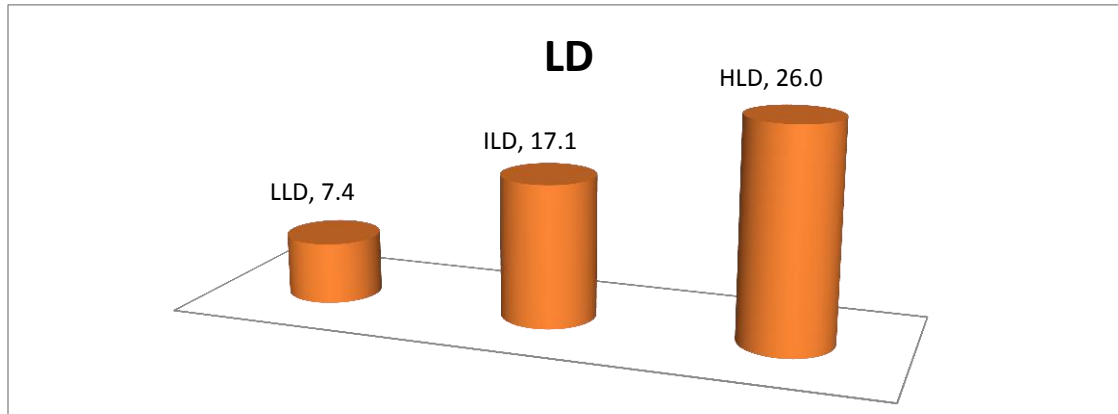
Figure 3: Mean score for each three LD groups

3.2 *Classification of Verbs*

There are fifty-nine verb types used by thirty-seven subjects. The verbs are then scored on imageability. They are scored on a seven-point scale with '1' representing least imageability and '7' representing most imageability. The scale is not prepared by the researcher. The scale is a well used and documented instrument (Gilhooly & Logie, 1980; Ma, Golinkoff, Hirsh-Pasek, Mcdonough & Tardiff., 2009). To score the verbs, there are three individual raters with a high degree of proficiency in English. The three raters were given a list of the verbs along with the seven-point scale on the same page, and there were clear instructions on what to do on the top of each page. The average score is then assigned to each verb to determine its imageability. For example, the verb 'break' receives three scores 7, 7 and 3. The average score of 5.7 is assigned to the verb. After all the verbs are assigned their respective imageability score, the verbs are categorised into three groups, least imageability group, mid imageability group and most imageability group.

4. Data Analysis and Findings

We now present an analysis of the use of the verb inflections in writing tasks. First we compare between the inflections, '-ed', '-ing', '-es' and past irregular forms.
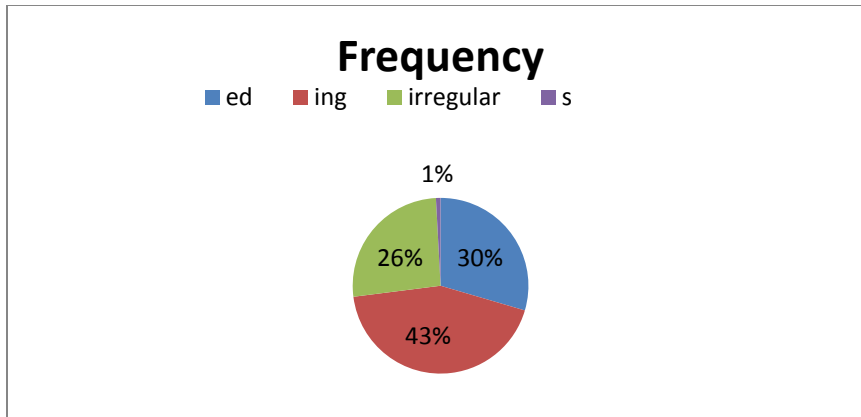
Figure 4: Comparison between the verb inflections in the Writing task

On the basis of the transcribed data derived from the story-writing task, the graph above compares the frequency rates of the inflectional morphemes used for verb forms. The inflection '-ing' has the highest frequency rate at 43% closely followed by '-ed' at 30%. The past irregular forms have a frequency rate of 26%. The inflection '-s' has the lowest frequency rate of only 1%. The reason behind the low use of '-s' is the very nature of the task. It was a story writing task and the subjects, following the conventions of story-telling used past tense more predominantly rather than the present tense. Another argument can be in line with the order of acquisition. As studies have already shown that the third person singular '-s' is acquired much later both in L1 (de Villiers & de Villiers, 1973) and L2 (Bailey, Madden, & Krashen, 1973; Dulay & Burt, 1973) contexts. Subjects belonging to three lexical groups LLD, ILD and HLD exhibit considerable production of progressive forms. On the other hand, 3rd person singular is found to be the most difficult morpheme to acquire. The subjects belonging to the low lexical diversity group with low language proficiency do not produce any 3rd person singular morpheme which tends to be acquired only when the lexical diversity level rises. The irregular past proves to be more difficult than progressive '-ing', but easier than 3rd person singular to be acquired by ESL learners. The predominance of the progressive marker '-ing' in our study is consistent with the findings in the previous studies (Bailey, Madden and Krashen, 1973; Brown, 1973)

We now present an analysis that compares between the verb stems' imageability and the use of inflected forms. We have selected the verbs on the basis of their inflection count. We have selected twelve verb stems which have the lowest token count at only 1. These verbs are, 'catch', 'cry', 'fall', 'fly', 'find', 'get out', 'help', 'save', 'search', 'stop', 'stick', and 'swim'. Then, we have selected the top five verb stems in terms of inflection count. These verbs are 'call' (inflection token 15), 'live' (inflection token 16), 'go; and 'look' (inflection token 19),'see' (inflection token 27) and 'sleep' (inflection token 35).
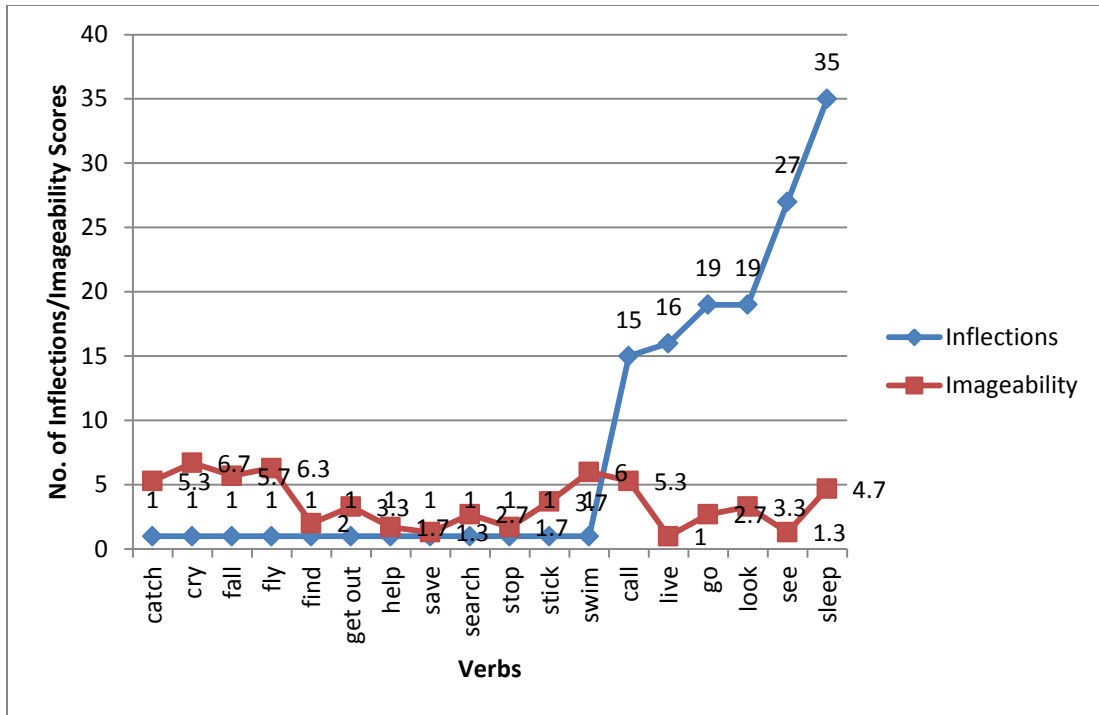
Figure 5: Imageability of stems and sizes of inflections

The graph above shows that there is no consistent correlation between the verb stems' imageability scores and the token size of inflected forms of the stems as hypothesised. We observe that low inflected forms include stems with both high and low imageability scores. The stems which have a low inflection count of 1 contain verbs with high imageability like, 'catch' (5.3), 'cry' (6.7), 'fly' (6.3), 'swim' (6) as well as verbs with low imageability like 'help' (1.7), 'save' (1.3), 'find' (2), 'stop' (1.7). On the other hand, if we study the stems with high inflection count, we observe that most verb stems have low imageability score. Two of the stems with high inflection frequencies are 'live' and 'see' have a very low imageability score of 1 and 1.3 respectively. This occurrence is largely due to the high input frequencies of these two verbs in textbooks. In our textbook analysis, we have seen that there are considerable occurrences of these verbs in all possible inflected forms. The stem which has the highest token size (35) of inflected forms is 'sleep' which with the imageability score of 4.7 belongs to the mid imageability group. The inflection frequency of 'sleep' may be due to the imageability of the action which the learner could readily associate with the pictorial representation and also due to the fact that the action is very familiar because subjects themselves carry them out (Golinkoff & Hirsh-Pasek, 2008). The findings above show that it is primarily input frequency that remains a major predictor in the acquisition of verb inflections in ESL context. This finding significantly contradicts study (Smolík & Kříž, 2015) in L1 context which suggests a strong correlation between imageability of stems and acquisition of their inflected forms. The effect of imageability is, however, less in the case of the highly frequent verbs in the ESL context. The highly frequent but less imageable verbs like 'live', 'see', 'go' have shown better productive abilities by ESL learners. As stated earlier, it is once again significantly established that for high-frequency words the effect of imageability is much less. The finding of ours is also supported by the study (Smolík and Kříž, 2015) that states that "The present findings suggest that high-frequency forms

are acquired regardless of imageability, while lower-frequency forms must be supported by semantics to appear in children's production" (p. 461).

5. Conclusion

Previous studies in L1 contexts have shown that the imageability of stems facilitates the acquisition of inflected forms of both regular and irregular verbs. In our ESL context, however, no direct correspondence is found between the stem imageability and the production of inflected forms. What comes to fore during our data analysis is the textbook frequency of stems which appears to be a determining factor in the acquisition and production of the inflected forms. It can be concluded that in ESL context, frequency and the resultant familiarity overrides imageability in the production of lexical forms. We, therefore, suggest that both in the case of the regular and irregular inflected forms the learners ought to be introduced to those inflected forms in meaningful contexts to facilitate meaning-form association in the acquisition process. The inflections need to be introduced in stem-affix combinations and the stems should consist of familiar words. The familiarity of stems is important because young learners seem to acquire words which refer to events and incidents that are directly related to their everyday life. Since most ESL learners in the Indian context do not get adequate exposure to English in the environment, direct teaching of vocabulary cannot be overlooked. Grade appropriate word-lists need to be made and they should be presented in the textbooks to make sure that learners get adequate exposure.

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Understanding Nominal Sentence in Sanskrit and Marathi

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Nominal sentences a.k.a. no-verb sentences, which are abundantly found in Indo-European languages, have gained much importance, both structurally and derivationally, in the discourse carried out by ancient and modern Indian theorists, especially in Sanskrit literature. Resorting on the grammatical rules provided by Pāṇini and his commentators, the discussion pivots around understanding the capacity of nominal sentences in denoting the complete meaning. Even though the theoretical debate by many modern Indian and western scholars highlights the importance of the finite verb (including the copular verb in the nominal sentences) in the sentence-semantics, the cognitive aspect of these sentences has remained unexamined and unexplored. This paper attempts to understand the cognitive nature of nominal sentences by carrying out experimental research on both Sanskrit and Marathi languages. The subjective reports of 32 readers from India provide evidence of making reference to the copula while comprehending nominal sentences. Interestingly, nominal sentences in Sanskrit, unlike in Marathi, are processed more effortlessly than the complete sentences, especially by the readers with minimum exposure to the language. The contrastive analysis is performed for two variables viz. difference between Sanskrit vs. Marathi comprehension and online vs. Classroom-controlled experiments. The data is validated by performing statistical analysis tests. We also present experimentation details along with some observations, remarks, limitations and possible future work.

‘Sahib, they put handcuffs on Annasaheb’...
‘What Annasaheb?’
‘Of the Navayug Studio’
‘For what?’...
‘Six months at the most.’...
‘Why?’
‘How much longer do they hang you for drinking liquor?’[i]

1. Introduction and Literature Review

Many ancient Indian theories in Sanskrit have attributed a prominent role to the verb while explaining the sentence and the process of verbal cognition. Many Sanskrit grammarians (such as Kātyāyana) and rhetoricians (such as Bhojadeva) in ancient India have given a verb-centric

[i] The dialogue takes place between P. L. Sahib and his laundryman, Namu. Namu informs P. L. Sahib whereabouts of Annasaheb. The questions then asked by P. L. Sahib and the answers given by Namu are all nominal sentences as mentioned here. The average reader can successfully, rather more efficiently, understands the message conveyed by the whole paragraph. This dialogue is taken as an example of nominal sentences in the conversational data.
(The dialogue is taken from the book ‘The Best Indian Short Stories, Vol. II’- Story 1 ‘Namu, the Dhobi’ collected by Khushwant Singh published by Harper Collins, New Delhi. The original Marathi story ‘*Nāmu Parīṭ*’ written by P. L. Deshpande is translated in English by M. V. Rajadhyaksha.)
(The original Marathi story is available at https://www.youtube.com/watch?v=x8tleT1SA0o&t=929s The audio clip was accessed on 20 February 2020.)

definition of a sentence. Similarly, several grammarians while explaining Marathi grammar have also considered the verb as an important part of speech (Tarkhadkar, 1857). Damle (1970) mentions that, it is only with the verb, the sentence becomes complete (*'kriyāpadācyā lakṣaṇāt 'vākyapūrakatva' yā dharmācī… bhar ghātalī pāhije.*') and the same is emphasized by Govilkar (2001). Arjunwadkar (1987) states, '*vākyālā vākyapaṇ ākhyātāmulec yeta*' (Meaning: 'Sentence is known as a sentence only when it has a verb') which means that without a verb, a sentence is incomplete. He goes on arguing that '*vyākaraṇadṛṣṭīne kriyāpada hā vākyācā prāṇ āhe*' (Meaning: 'grammatically speaking, the verb is the soul of the sentence.'), hence if a user wishes to create a one-word sentence, it has to be, exclusively, of the verb. The complete message is conveyed only when the sentence contains a verb. Hence it goes without saying that the unavailability of the verb makes the linguistic string a nominal sentence and thereby an incomplete sentence.[ii] Sanskrit grammarians take the verb at the central place in the sentence semantics and argue that every other word in the sentence is construed with the respective verb in order to derive the meaning.[iii] The verb, thus, plays a major role in the process of comprehension of any sentence while other words in it just confirm the meaning stated by the verb.[iv] Even in the derivational process of the nominal sentence (i.e. a sentence without any verb/ predicate), many grammarians assume the copular verb in order to account for the words attested on the surface level of the language.[v] Similarly, it is stated that the verb-less sentences in Marathi are accounted for by the virtue of '*adhyāhāra*' (i.e. ellipsis of the verb ['*āhe*' or '*hoy*']) (Tarkhadkar, 1857; Arjunwadkar, 1987).

In Indo-European languages such as Sanskrit, Marathi, and Hindi, there are abundant traces of nominal sentences (NS, henceforth), especially in the conversations.[vi] They not only

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[ii] For the detailed account on the sentence-definitions by earlier Indian scholars and the discussion by modern Indian and western scholars on the sentence-definition, please refer to Gajjam et.al. (2018).

[iii] Verb denotes the action and the other words play the role of means that carry out that action. As Staal (1989) has rightly pointed out, 'a sentence is seen as a little drama played by an agent and a set of other actors...' Finite verb forms in the sentence demand semantic roles, according to valency patterns depending on the voice (active/ passive) of the form and the governance (transitive) of the root. Noun and adjective forms provide actors which may fill those roles, provided agreement constraints are satisfied. (Huet, 2006)

[iv] While explaining the sentence-definition mentioned in the '*Vākyapadīya',* Iyer (1983) states that "whether the sentence consists entirely of the verb or whether there are also other words in it, the meaning of the sentence is of the nature of an action or a process. As soon as the verb is heard, a particular action, associated with a particular agent and other accessories and, therefore, different from other actions, is understood. When the other words of the sentence, expressive of the accessories and their qualifications are heard, they do no more than confirm the understanding of a particular action that has already taken place."

[v] From a derivational perspective, Deshpande (1987) argues that the construction '*rāmaḥ sundaraḥ*' in Sanskrit can be derived without making any reference to the finite verb since here, *rāma* is neither an agent nor the patient of any action stated by any verb which is present or understood. He takes the derivation of such NS without any reference to the copula as against Bronkhorst(1990). Bronkhorst argues that not all NS are complete. He provides illustrations given by *Patañjali* i.e. in a sentence '*vṛkṣaḥ plakṣaḥ*' (Meaning: 'the Figtree [is] a tree'), the word '*asti*' (ís') is understood.

[vi] Apart from conversations, other examples of nominal sentences in Sanskrit are: '*yogaścittavṛttinirodhaḥ*' (Meaning: 'Yoga [is] restraining mind from taking various forms'), '*paropakāraḥ puṇyāya, pāpāya parapīḍanam*' (Meaning: 'Doing good to others [conduces] to merit, and doing harm to others [leads to] sin'), etc. Similarly, many famous Hindi movie dialogues are devoid of any verb form such as, 'nām vijay dīnānāth chauhān' (Meaning: '[My] name [is] Vijay Dinanath Chauhan'), etc. An all-time famous Marathi movie dialogue 'mi dhananjya māne, aaṇi hā majhā bāyako pārvatī' (Meaning: I [am] Dhananjay Māne and [s]he [is] my wife Parvati), a Marathi idiom 'duṣkālāta terāvā mahinā' (Meaning: 'Hard times get extended just when we are hoping they would end'), etc. are also devoid of verb form, and are still very much comprehensible.

denote the complete desired meaning intended by the speaker but also bring about more efficient and rapid conversation. Dhongde states that NS in Marathi are mostly confined to exclamations and elliptic questions (2009). English also depicts few instances of nominal sentences, though not as abundantly, in newspaper headlines, exclamations, proverbs and the titles of the books, etc.[vii]

As explained earlier, NSs in Sanskrit have been studied from syntactical (Speyer, 1886; Apte, 1965; Gren-Eklund, 1978; Staal, 1989) and derivational (Deshpande, 1987; Bronkhorst, 1990) point of views till date. Several types of research on the NS in other Indo-European languages, Semitic and Ural-Altaic languages are devoted to the theoretical discussion and NSs are also studied from an application point of view such as automatic parsing of NS.[viii]

While a lot of theoretical discussion on the NS by Indian and western scholars has gained much importance, the cognitive aspect of these sentences has still remained an unexplored area. We, in this paper, study NS in Sanskrit and Marathi from an experimental perspective to understand the cognitive aspect entitled by nominal sentences. The paper tries to understand whether Sanskrit and Marathi readers take copula while deriving meaning from the nominal sentences in order to understand the sentences completely. We also perform a contrastive analysis of the data in terms of comprehension of NS vs. complete sentences (henceforth, CS) and comprehension among native and non-native speakers (i.e. Marathi vs. Sanskrit). This short account is the extension of the earlier work on the NS ((Gajjam & Kulkarni, 2020, in press)) which focused only on the Sanskrit language and also lacks the records obtained from the classroom-controlled experiment.

2. Our Work

We set the hypothesis as: 'Sanskrit and Marathi readers make reference to the copula while comprehending NS in order to derive the complete meaning.'

2.1 The research objectives

Do the majority of readers comprehend both NS and CS in a similar manner i.e. making reference to the verb, attested or not-attested on the surface level of the language? Is there any difference in the accuracy of NS compared to the CS i.e. is the cognitive load posed by both NS and CS same? To find answers to these questions, we carry out two classroom-controlled experiments on Sanskrit and Marathi readers in three junior colleges in Maharashtra. This section presents the experimentation details such as experiment design, data set and participant description, measures taken to evaluate the data etc.

2.2 Research Methodology:

We, a team of two linguists, have chosen, finalised and validated a set of six conversational paragraphs[ix] of each Sanskrit and Marathi, consisting of at least one NS. The dataset consists of

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[vii] Examples of English NS are: a newspaper headline such as 'Tsitsipas into Marseille Final', exclamations such as 'Fantastic!' and 'No problem!', a proverb such as 'Out of sight, out of mind' and finally titles of the books such as 'A tale of two cities' (by Charles Dickens), and 'A bend in the river' (by V.S. Naipaul), etc.
[viii] For a detailed account on earlier works on NS, please refer to (Gajjam & Kulkarni, 2020, in press)
[ix] A sample paragraph in both experiments is given in Appendix II.

modern writings.[x] Each paragraph that did not exceed 20 sentences contains two multiple-choice questions related to the comprehension of NS and CS respectively. The questions were formulated in such a way that the correct answer to Q1 confirms the hypothesis that the reader has resorted to the copular verb while processing the NS.[xi] The purpose of Q2 is two-fold. Firstly, to measure the comprehension accuracy of CS, and secondly, to ensure whether the reader was performing attentive reading and not marking random answers without reading.

A total of 32 randomly-chosen readers, mainly female, belonging to the age group of 15 to 22 years (except one participant of age 51 years) participated in the experiment. All of them were learning in junior college in Maharashtra state of India[xii] and were acquainted with both languages perfectly well. Almost all of them were the native speakers of Marathi and have daily exposure to spoken Marathi. The majority of the readers (72% of the total population) read Marathi text daily. On the other hand, only a few readers (27% of the population) have rare exposure to spoken Sanskrit. But almost 44% of the total population reads Sanskrit daily. Since many of them have learned Marathi at an early age, the span of exposure to the language is large. All of them have started learning Sanskrit at the age of 14/15 years therefore they have a minimum of 1 year to a maximum of 5 to 6 years span of language exposure to Sanskrit.

Each student was informed about the experimentation procedure, annotation input method and a need for attentive reading before the experiment begins.[xiii] None of them were aware of the purpose of the experiment beforehand. Participants were asked to give their consent before starting the experiment. Their demographical information such as age, gender, first language, etc. was noted for the purpose of data analysis from different points of view. It was a pen-paper experiment where each reader was given a set of six paragraphs in Sanskrit and then in Marathi right in the beginning. Since all paragraphs and the questions beneath them were available to them at the hand, the reader could navigate through the experiment as per their wish. Hence there was no control over their reading behaviour. It was a silent and self-paced reading methodology. Readers were given the liberty of reading at their own pace to create a more natural environment.[xiv] However, the average time taken to finish the experiment in Sanskrit and Marathi was 47 minutes and 32 minutes respectively. Each participant was rewarded with two useful stationery items as a reward for their time and effort in participating in the experiment.

3 Results and Analysis

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[x] The data for Sanskrit is taken from website https://sambhashanasandesha.in/, and for Marathi is taken from https://www.misalpav.com/ (The links were accessed in July 2019)

[xi] The experiment design is modeled in such a way that we can only formulate a one-tailed hypothesis. The only aim is to find out the reference made to the copular verb while processing the NS.

[xii] A set of two experiments (on Sanskrit and Marathi each) were conducted in three colleges in Solapur and Pune cities in Maharashtra. [The colleges are: (1) D.B.F. Dayanand College of Arts and Science, Solapur; (2) Sangameshwar College, Solapur; and (3) Fergusson College, Pune]

[xiii] We have assured each participant about maintaining the anonymity and the privacy of their personal information. Similarly, they were informed beforehand that there was no potential harm in participating in the experiment such as physical or mental damage, etc. Rather many participants have given feedback that they not only enjoyed the process but also could able to test their comprehension skills which would be beneficial in their curriculum.

[xiv] The classroom-controlled environment poses the investigator-participant bias (a.k.a. observer-participant bias) in which the task or the comprehension-accuracy of the readers is affected by the presence of the investigator. We present the results obtained from the online experiment conducted on the same data set (where there is no control of the observer) to carry out contrastive analysis in Section 5.

The results have been calculated by calculating the percentage of adding all correct answers annotated by the participants to both questions. The cut-off for accuracy is set at 70%. It is observed that the majority of the readers have comprehended NS successfully as 78% of the population (25/32 readers) scored more than 80% accuracy in both Sanskrit and Marathi experiments confirming the hypothesis that NS are easily understood by taking copula to derive the meaning out of it.

Population-wise Accuracy		
Accuracy	***Sanskrit***	***Marathi***
100%	22%	44%
83%	16%	3%
66%	6%	3%

Table 1: Population-wise Accuracy to both types of sentences together

The degree of comprehension is calculated by dividing the percentage of accuracy into 3 categories i.e. 100% accuracy (6/6 correct answers), >83% accuracy (5/6 correct answers) and >70% accuracy (4/6 correct answers) (refer to **Error! Reference source not found.**). It is noticed that Marathi sentences are comprehended more easily than the Sanskrit ones. The ratio of Sanskrit to Marathi is almost double i.e. 22% and 44% of the total population has 100% accuracy for both questions in Sanskrit and Marathi respectively. Thereby, many readers in Sanskrit have scored more than 66% accuracy, but less than 100% accuracy.

The two-fold contrastive analysis of NS vs. CS comprehension is carried out, firstly by percentage-wise accuracy, and then by performing statistical analysis of ranges of two variables (i.e. Q2 and Q3 for NS and CS respectively) (**Error! Reference source not found.**). It is found that, apparently, NS in both Sanskrit and Marathi are comprehended more accurately than the CS. However, the difference between NS and CS comprehension is significant only for Sanskrit (p-value is 0.04). Marathi shows no such difference (insignificant p-value i.e. 0.2). It can be concluded that for average reader NSs in Sanskrit pose less cognitive load than the complete sentences containing verb/s. For Marathi, readers can process NS as easily as they process CS. The reason behind this might be the first language of the readers. Each reader was a native speaker of Marathi, and they have learned Sanskrit as a second language at the age of 14 or 15 years. For native speakers both NS and CS are similarly communicative, while for a second language speaker NS is more undemanding than the CS.

<table>
<tr><th colspan="9">Percentage-wise accuracy among the participants</th></tr>
<tr><th></th><th colspan="4">Sanskrit</th><th colspan="4">Marathi</th></tr>
<tr><th></th><th colspan="2"></th><th colspan="2">T-test</th><th colspan="2"></th><th colspan="2">Z-test</th></tr>
<tr><th>Accuracy</th><th>NS</th><th>CS</th><th>M_D</th><th>P</th><th>NS</th><th>CS</th><th>M_D</th><th>P</th></tr>
<tr><td>100%</td><td>46%</td><td>32%</td><td rowspan="4">0.42</td><td rowspan="4">0.04</td><td>69%</td><td>56%</td><td rowspan="4">0.16</td><td rowspan="4">0.2</td></tr>
<tr><td>83%</td><td>35%</td><td>29%</td><td>19%</td><td>28%</td></tr>
<tr><td>66%</td><td>16%</td><td>26%</td><td>12%</td><td>16%</td></tr>
<tr><td>50%</td><td>3%</td><td>13%</td><td>-</td><td>-</td></tr>
</table>

Table 2: Percentage-wise accuracy among the participants and T-test/ Z-test Results

To find an answer to the next research question, whether all NS pose a similar kind of cognitive load as CS, we perform separate analyses for each NS (i.e. each paragraph) (**Error! Reference source not found.**). Some interesting results i.e. some inconsistencies in the results are found in the comprehension of NS vs. CS in Sanskrit. As mentioned earlier, NS in Sanskrit is effortlessly comprehended than the CS, only except in Paragraph 4. In Paragraph 4, the NS was '*kaḥ vivādaḥ nirarthakaḥ*' (Meaning: '[According to the king] which debate is futile?'). Here, a reader was required to make reference not only to the verb '*asti*' ('to be', here '*is*') but also to the message presented in the previous sentences, which might have posed more cognitive load than the CS, hence yielded less correct answers compared to CS. This difference in NS vs. CS is significant i.e. 0.01. In Paragraphs 3 and 6, the valuable difference between NS and CS can be seen (p-values are 0 and 0.02 respectively) where NS is comprehended easily than CS. Similar difference can be seen in the Marathi experiment only for Paragraph 2 (p-value is 0). The incongruent results are observed with Paragraph 5 in Marathi where CS is easily processed (p-value is 0.05).

Paragraph-wise Comprehension: Accuracy and t-test results								
	Sanskrit				***Marathi***			
	NS	***CS***	***T-test results***		***NS***	***CS***	***T-test results***	
	Q1	***Q2***	**M_D**	***P***	***Q1***	***Q2***	**M_D**	***P***
Para1	77%	71%	0.06	0.28	94%	100%	-0.06	0.13
Para2	90%	90%	0	0.5	100%	75%	0.25	**0**
Para3	100%	68%	0.32	**0**	94%	91%	0.03	0.35
Para4	68%	90%	**-0.2**	**0.01**	94%	91%	0.03	0.35
Para5	100%	97%	0.03	0.16	88%	97%	-0.09	**0.05**
Para6	87%	65%	0.23	**0.02**	88%	88%	0	0.5

Table 3: Paragraph-wise Comprehension: Accuracy and T-test/ Z-test Results

The data is validated by performing an Inter-Annotator agreement using Fleiss' Kappa among all readers for both questions in two experiments. The highest accuracy 1 can be seen for the majority of the questions which is a perfect agreement, while for some questions readers seem to have a difference in answers such as Q2 of Paragraph 6 in Sanskrit which gained only 0.53 of accuracy which is a moderate agreement. Since all readers agree with each other in terms of accuracy, we confirm the fact that there was no inattentive reading among the readers or no answer was randomly marked. This forms the ground truth of the experiment.

Inter-annotator Agreement				
	Sanskrit		***Marathi***	
	Q1	***Q2***	***Q1***	***Q2***
Para 1	0.64	0.57	0.88	**1**
Para 2	0.82	0.82	**1**	0.61
Para 3	**1**	0.55	0.88	0.82
Para 4	0.55	0.82	0.88	0.82
Para 5	**1**	0.94	0.77	0.94
Para 6	0.77	**0.53**	0.77	0.77

Table 4: Inter-Annotator Agreement Results

Some variables that affect the comprehension accuracy:

Some variables such as language exposure (in years and day-to-day basis) are taken into consideration to study their effect on comprehension accuracy. Readers having language exposure to Sanskrit for less than 4 years process both NS and CS differently as the significance difference (p-value is 0.03) can be seen in **Error! Reference source not found.**. Readers having more than 4 years of exposure process NS as effortlessly as they process CS. Even though it can be argued that the capacity to take the verb as filler while processing NS comes easily with more exposure to the language, it is seen that even with less exposure the NS are comprehended easily, rather more efficiently and accurately than CS. The reason behind this might have been the cognitive load the verb in Sanskrit carries. It requires more time and effort to process the verbs, along with its suffix denoting tense, number, person and agent which might pose more processing load. In Sanskrit NS, the unavailability of the verb makes it easier to process. Coming to the experiment on Marathi, almost all participants have similar amount of linguistic exposure to Marathi i.e. more than 10 years. Since participants do not vary in their distribution with respect to linguistic exposure, the contrastive analysis cannot be performed.

	T-test results	
Ling. Expo.	M_D	***P***
>4 years	0.71	**0.03**
4-8 years	0.07	0.41

Table 5: Linguistic Exposure (in years) and T-test results

It is also observed that many readers have daily exposure to reading Marathi, but rare exposure to Sanskrit. We take this variable to perform a contrastive analysis of Sanskrit vs. Marathi (**Error! Reference source not found.**). Daily speaking and reading of Sanskrit and Marathi do not affect the comprehension of NS and CS, which means NS are comprehended in a similar manner, and as effortlessly as CS is processed. The only difference among NS and CS comprehension can be seen when readers have rare exposure to speaking and reading Sanskrit (p-values are 0.02 and 0.04 respectively). Interestingly, NS is processed in a more undemanding manner than the CS. As stated before, the lack of verb form in NS leads to effortless processing. On the other hand, Marathi shows no such difference, viz. readers having daily exposure or rare exposure to Marathi yield the same results. We can conclude that even the little exposure to the Sanskrit language allowed the reader to bridge the gap left out by the Sanskrit nominal sentences in order to derive the complete meaning out of it.

	Sanskrit				**Marathi**			
	Speaking		***Reading***		***Speaking***		***Reading***	
Regular Expo.	M_D	***p***	M_D	***p***	M_D	***p***	M_D	***P***
Daily Expo.	-0.2	0.4	0.36	0.21	#	#	0.24	0.1
Rare Expo.	0.59	**0.02**	0.56	**0.04**	#	#	-0.1	0.4

Table 6: Regular Exposure to the Language and T-test results

Data cannot be compared as each Marathi reader has daily exposure to the spoken Marathi.

To conclude, the average reader of Sanskrit processes Sanskrit NS easily than the CS, especially when a reader is a beginner of Sanskrit i.e. having less than 4 years of experience and having rare exposure to reading and speaking Sanskrit. On the other hand, Marathi readers show no such difference i.e. they process both NS and CS in a similar manner. Only when the cognitive load in the NS increases, these readers require more effort to process the NS than the CS.

4 Discussion

The significance of the results in accordance with previously conducted research:

The earlier work on the comprehension of NS in Sanskrit ((Gajjam & Kulkarni, 2020, in press)) and Marathi (unpublished research) focuses on the online experiments in which there is no control of the investigator on the readers' reading behaviour, speed, frequency, and sequence. However, we measured the time taken to complete the task. In an online experiment, the average time taken to finish the experiment of Sanskrit and Marathi is 18 to 12 minutes respectively while the classroom-controlled experiment required more time to finish i.e. 47 to 32 minutes respectively. There might be two reasons behind the requirement of more time viz. the classroom-controlled experiment might have posed the investigator-participant bias in which readers are conscious of the investigator being present in the room hence their reading behaviour is different than their normal reading behaviour.[xv] In the classroom-controlled experiment, all participants are teenagers (age group of 15 to 22 years) being honest in reading the text more attentively and marking answers accurately which might take more time to finish the task. Secondly, in the classroom-controlled experiment, participants belong to age 15 to 22 years with minimum exposure to the language i.e. less than 8 years, while as in the online experiment, most of the readers have more than 20 years of experience in the Sanskrit language. Hence, the difference in the comprehension accuracy can be seen, where 74% of the total population in the online experiment while only 46% of the total population in the classroom-controlled experiment have 100% accuracy to NS. CS comprehension in the online experiment does not differ much from NS comprehension (73% of the total population has 100% accuracy), while in classroom-controlled experiment it is much less viz. only 35% of the population has 100% accuracy which made significant difference in Sanskrit NS and CS comprehension (**Error! Reference source not found.**). On the other hand, Marathi data shows no such difference among the comprehension of NS and CS in both online and classroom-controlled experiments (**Error! Reference source not found.**). A few more experiments in a classroom-controlled environment on the readers belonging to the different age-groups, and having more exposure to language may provide a complete picture.

[xv] Even though we have tried to eliminate the investigator-participant bias by keeping the environment as neutral as possible in order to have the informal kind of situation for performing the task, the readers in their teenage are seen to have succumbed to the presence of the investigator.
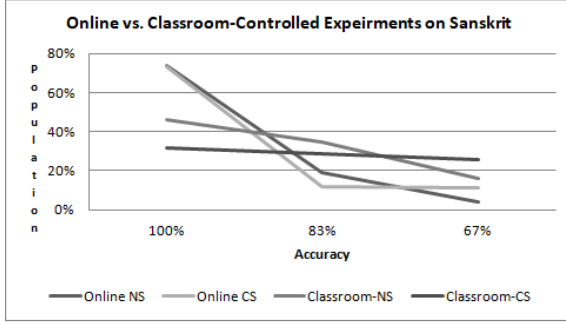
Figure 1: Difference between the comprehension accuracy of NS and CS in online vs. classroom-controlled Experiment on Sanskrit
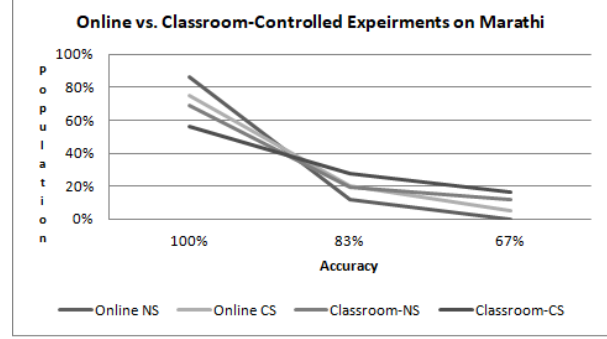
Figure 2: Difference between the comprehension accuracy of NS and CS in online vs. classroom-controlled Experiment on Marathi

Some philosophical implications:

There had been a detailed discussion of whether a nominal sentence is complete without a verb in Sanskrit literature. Based on our study, we can argue that, from a cognitive point of view, the nominal sentence in itself is complete, when it comes in conversations. The argument holds true at least for Sanskrit and Marathi languages and also for the restricted sample i.e. for teenage readers. The average reader can assume the copular verb for the respective nominal sentences in order to derive the complete meaning out of it. Rather, most of the nominal sentences carry out a rapid and more efficient conversation. While talking, a speaker never pays attention to whether he is using a syntactically complete sentence having a finite verb form. The purpose of the conversation is in conveying the message. If the conveyance of the message can happen without any verb, in that case, a speaker proceeds with the nominal sentences. Neither does a listener find it incomplete as long as it fulfils his/her desire to complete meaning.

5 Limitations and Future Work

The main limitations of the classroom-controlled experiment are that it is time-consuming and a small sample is tested at a given point of time, unlike an online experiment in which a large number of participants take part in the experiment simultaneously. Another limitation related to the sample size in the current study is all participants are teenagers. The limitation related to the data set is that only paragraphs from the modern writings are chosen and tested. A large sample size, having readers from different age groups and having more exposure to the language can be tested and the current research can be extended. Several conversational paragraphs from the ancient Sanskrit literature and Marathi novels can shed some light on the process of NS comprehension.

Apart from the cognitive study of the NS, the large data gained from the several experiments can be used for many NLP purposes such as deriving rules for Word sense disambiguation, sarcasm detection, and understanding, automatic parsing of nominal sentences, etc. Some pedagogical insights can also be drawn from the study in order to improve the language models used to teach children, and adults having language disabilities such as aphasia, agrammatism, and other speech disorders.

6 Conclusion

The nominal sentences, which are abundantly found in the Indo-European languages, are studied from a cognitive or communicative perspective by conducting two classroom-controlled experiments on the conversational data containing nominal sentences in Sanskrit and Marathi using 32 college-going students as participants in Maharashtra, India. It is found that the nominal sentences in both Sanskrit and Marathi are processed by taking a copular verb to derive the complete meaning out of it. It is interesting to note that, the nominal sentence, being devoid of verb, pose less cognitive load than the complete sentences in Sanskrit hence they are processed more effortlessly and yield more accurate results, especially when the readers are beginners or have less than 4 years of experience or have a rare exposure to spoken or written Sanskrit. Marathi shows no such difference i.e. the average Marathi reader or the native speaker of Marathi processes both nominal sentences and complete sentences in a similar manner. It is also noted that the nominal sentences which are considered as incomplete on the surface level of language, syntactically or derivationally, seem to be complete from a communicative or cognitive aspect, at least for Sanskrit and Marathi.

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A STUDY OF SIGNIFICANCE OF QUESTIONING SKILL FOR ENGLISH LANGUAGE LEARNING: IMPLICATIONS FOR TEACHERS AND TEACHER EDUCATORS

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A B S T R A C T

Among the skills used in teaching learning process, the skill of questioning remains in the fore front. This skill seems to be in dirigible in gradient of teaching learning process which not only encourages the teacher as well as students to be alert in during interaction process but it makes the entire process of teaching learning more interesting, purposive, goal oriented and enjoyable. In the field of language learning, especially english, the skill of questioning acts as a vehicle for development of various language skills i.e. listening of english, speaking of english, reading of english, writing of english etc. The skill of questioning makes the system of english language learning more comprehensive, communicative and target oriented. Therefore, teacher educators and the teachers working in the field of english language teaching learning should have basic knowledge on different types of questioning, i.e. what is questioning, why is questioning, how is questioning, when to question and so on. In the present article, steps have been taken to make the teachers and teacher educators aware about the significance of questioning skill for english language learning.

1. Introduction

Teaching is a process of socio-cognitive communication. It owes communicative relationship between the teacher and the taught through the via media of curriculum/environment in a socially desirable context. During the process of communication, a number of interactions are made between the teacher and the taught. The process of questioning constitutes an important part of this communicative process. Hence, in a teaching learning situation, a number of questions are asked by the teacher to the students for the development of the lesson; and at the same time the students raise so many questions to the teacher for the clarification to their confusions and increasing their understanding. Therefore, in teaching learning situations, the process of questioning is regarded as a two-way sharing of thinking and feeling, where both the teacher and the taught are the active participants. In other words, one can say teaching learning process is followed by a number of skills, where the skill of questioning remains at the central position. Actually speaking, the success of teaching learning depends upon the success of questioning. Colvin remarked, “No teacher in elementary and secondary schools, can succeed in his instruction, who has no fair mastery over the art of questioning”. Therefore, it is told, “Questions are the essential tools in the hands of the teacher to make his teaching interesting and effective”. Questions are the interrogative statements, which are asked to stimulate the learner’s mental activities to search for the answer, to solve the problems and for many other purposes.

2. Questioning in English Language Learning

English language may be distinguished from other languages due to its importance for the entire mankind. As an international and communicative language, it aims to achieve mastery over the four language skills (i.e. listening, speaking, reading and writing) among its clients/students. Hence, it is the foremost duty of the english language teacher to help the students to develop mastery over these four fundamental skills of english learning. In this context, NCERT (2000) remarked, "All teachers who teach english should have basic proficiency in english. All teachers should have the skills to teach english in ways appropriate to their situations and levels based on some knowledge of how languages are learnt. A variety of materials should be available to provide an input-rich curriculum, which focuses on meaning". All kinds of language learning including english language learning require a specific type of environment which is functionally different from the learning of many other subjects or fields of knowledge. Language learning is basically skill oriented in nature. Hence, language learning environment should be skill oriented in nature. National Focus Group of NCERT (2007) reported that proper environment is needed inside as well as outside the school for a child to develop the basic skills of language. Greene and Petty (1963) remarked that language is a skill subject like arithmetic and other subjects. The skills in language learning form an extremely important body of knowledge that every individual must master in order to meet all types of school and life situation. Stevick (1982) stated that one of the most important tasks of a language teacher is to help student to build up the basic linguistic skills/competencies from which his/her future performance must flow. Chesebro (2000) stated that during school stage, learning activities should focus upon the acquisition of basic linguistic skills. Further he stated that here are different aspects of communication but fundamentals are speaking, listening, reading and writing. These communication skills are central to our lives and work; provide support for the development of whole person, the improvement of educational enterprise, being a responsible citizen of the world, both socially and culturally and succeeding in ones career in the business world.

The teacher follows a number of techniques and procedures for developing the four important language skills ((i.e. listening, speaking, reading and writing) in students. The procedure of questioning is regarded as the most important technique among them. It is regarded as the stepping-stone or the key points for skill development. Not only in the higher classes but also in the lower classes, it is used as an instrument for skill development. All the important language skills (i.e. listening, speaking, reading and writing) can best be realized by the students in the classroom with the help of effective question answer technique. The skill of questioning constitutes the core heart of language learning and it is regarded as the machinery, which gives the practical shape to language learning.

When the teacher asks various questions systemically and correctly to the students with the proper style, voice and intonation, it develops the listening skill of the students. Similarly, at times the students find difficulty to understand the questions of the teacher and in that moment the students ask the meaning of those questions to the teacher, ultimately which develops the students speaking skill. Through the process of learning, a number of questions are created in the minds of students. In order to get the answer of these questions, the students ask the teacher these questions, which also develop the speaking skill in students. For many a time, the teacher writes various questions in the blackboard and asks the students to write those questions in their copies to answer it. In the process of writing questions and answers in the copy, both writing and reading skills of the students' develop. Similarly, sometimes the students are instructed by the teacher to find out certain questions from book to answer them correctly. This increases the writing skill of the students. All these four fundamental skills of english language can be developed in students through the use of proper questioning technique in one way or other. Besides these four fundamental skills, a number of other types of skills like thinking, reasoning, understanding, power of imagination, critical judgment etc. in english language are developed with the help of questioning.

Therefore, the questioning technique is regarded as the chief ingredient in the teaching learning of all the language skills and a key point for their success. It is an essential component of skill development in

language study and especially from the viewpoint of language development. All the contents, methods and the act of teaching should be directed towards the effective use of questions in the language learning.

The teachers and teacher educators working in the field of english language teaching learning should be well conversant with the different aspects of effective ways of questioning. They should be very much clear about what is questioning, why is questioning, how questions can be despatched, when questioning is needed to be despatched etc. in the field of language learning. The knowledge on questioning can help a teacher educator to train his/her clients/ trainee teachers regarding the effective use of questioning in the field of language learning. Similarly, the knowledge on questioning can help a teacher to achieve the better language skills i.e. reading skill, writing skill, speaking skill etc. among his/her clients/ students. Hence, the present study is designed to achieve these four objectives:

1. To establish the purposes of using questions.
2. To explore key elements of effective questions.
3. To analyze the teacher behavior in asking question.
4. To understand various type of questions.

3. Purposes of using Questions in English Language Learning

Mainly there are four fundamental aims of using the questions in learning of english language. These are:

- To develop listening skills in pupils.
- To help the pupils to speak english correctly with proper intonation and voice.
- To help the pupils to read and understand written english properly.
- To help the pupils to write the correct and systematic english.

Besides these, an effective question develops a number of sub skills in students. Some of those are:

- It co-relates the present language learning with the background experiences of the students.
- It develops thinking, reasoning and the power of imagination among the students relating to language development.
- It develops the power of understanding and critical thinking relating to the complex language abilities.
- It helps the students to be active participant in the language learning process.
- It creates a sense of interest and curiosity among the students for learning of language.
- It enables the students to organize various facts and contents of english language systematically and express those in coherent manner.
- It bridges the gap between the teachers' assets and students' liabilities, and makes the language learning multi way communication.
- It makes the language-learning goal oriented, content oriented, purposive, objective and systematic.
- It helps the teacher to secure co-operation from the students and at the same time helps the students to clarify their doubts from the teacher.

4. Elements of Effective Questions used in English Language Learning

The followings should be the key elements of effective questions that are used in English language learning:

- The questions must facilitate the four fundamental skills of language learning.
- The structure of the questions should be good and systematic.
- The questions must be grammatically correct.
- The questions must be short, precise, relevant, logical, systematic, and clear and goal oriented.
- The languages used in the questions should be simple and understandable.
- The questions should be skillfully organized so that it can stimulate the students.

- The questions must be relevant to the topic, which is taught to the students.
- The questions must maintain the sequence or order.
- The questions should touch with the cognitive maturity of the students.

5. Teacher's Desirable Behaviour in asking the Questions

The teacher should posses the following desirable behavior while asking the various questions to the students:

- The teacher needs to ask questions with all care.
- The teacher needs to ask the students in such a way that students can understand clearly.
- The voice of the teacher needs to be audible to all the students.
- The teacher needs to ask questions in such a way that it brings alertness in the students.
- The teacher must ask adequate number of questions but not too much.
- The speed of asking the questions needs be normal.
- While asking the questions, the teacher needs to ensure the participants of all the learners
- The teacher needs to encourage all the learners to raise question
- Teacher statement of question must be free from language problem.
- Statement of question must be in clear voice with proper variation soon to act as a stimulant for the learners.
- The teacher needs to ask appropriate type of questions at appropriate time.
- The teacher must maintain continuity in asking questions.

6. Types of Questions that are to be avoided

The types of questions that are to be avoided in the classroom are given below:

- Ambiguous and insignificant questions are to be avoided.
- Chorus answer questions need to be avoided.
- Double-barreled questions must be avoided.
- Echo sounding and excessive suggestive type of questions must be avoided.
- Vague, inconsistent and grammatically incorrect questions must be avoided.
- Irrelevant, unusual and unsystematic questions are to be avoided.
- The questions which will discourage the students must be avoided.

7. Classification of Questions that are used in English Language Learning

The classification of questions that are used in english language learning is given below:

(A) Classification of questions on the basis of their nature

The classification of questions on the basis of their nature is given below:

Natural Vs. Formal Questions

A natural question is one, which is asked when the person asking questions is really feels easy to get the answer. These questions come to the children's mind automatically and they spontaneously ask these questions. But the formal type of question is set either by the teacher or by the pupils for a particular purposes. The questions which are given in the books and some times the questions asked by the teachers carefully are formal questions. Respondent does not feel much difficulty in answering the formal questions.

Fact finding Vs. Interpretational questions

A fact finding question calls for the ability to answer in terms of data already in existence, which may be known or unknown. An interpretational question on the other hand requires the students to draw an

inference from the data which are known but the known data may not yield the answer to the question without critical analysis and thorough judgment.

Memory Vs. Recognition questions

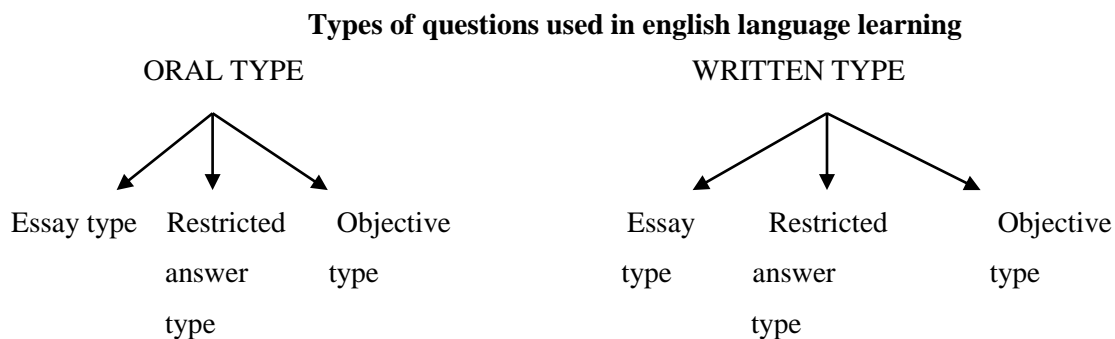
Memory questions are those, which must be answered with reference to something that has been learnt in the past. Recognition questions are those, which can be answered by observation or examination of data presented to the students.

Detailed Vs. Topical questions

A detailed question is asked for a simple fact, but a topical question is asked for a connected statement. A detailed question may require a single statement for answer while the topical question requires a discussion of a topic.

(B) Classification of Questions on the Basis of their objectives.

On the basis of the objectives of testing, the questions of english language may be divided into following categories:

Types of questions used in english language learning

Essay Type

Any english language question that requires an examinee to answer it within a paragraph or long pages and that demands a subjective judgment about its quality when it is scored, is known as essay type test. Essay type question is mainly aimed at developing the power of analysis, synthesis, organizing ability, value judgment etc. among the students.

Restricted answer type

Generally a short type of question can be answered within three or four credit point or few lines. These types of questions are asked to the students to measure a large amount of knowledge, understanding and skill of a language within a short period of time. The answers required for these types of questions are some extent objective than essay type test.

Objective type

These types of questions are very much pinpointed and require the pinpointed or single answer. These types questions are prepared for a specific purposes. A large variety of objective types of questions like matching type, recall type, recognition MCQ, completion type etc. are used in english language learning.

(C) Classification of Questions on the basis of demand of time/situation

The following types of questions are asked during the process of english language learning on the basis of demand of the time/situation. And, the teacher should ask such questions carefully when s/he has to proceed from one point to another point of time in the process of delivering the lesson.

Introductory questions

These types of questions are asked to the students to motivate them towards learning. These types of questions test the background experiences of the students and help them to relate the present learning with their previous learning. Generally, introductory questions are dialogue type in nature.

Comprehensive questions

These types of questions are asked to the student, after the topic has been taught to them. In order to know how far the students grasped the topic, these types of questions are asked. Generally, comprehensive questions include restricted or short answer type questions.

Summery type of questions

Such types of questions are asked to know whether the students have acquired the global knowledge on the topic or not. Generally the summary types of questions are of essay types in nature. Example-

Evaluative questions

In order to know how far the specific objectives of language learning have been achieved among the students, these type of questions are asked to the students. Generally these types of questions are asked at the end of the teaching a unit. All types of questions like essay type, restricted or short answer type as well as objective type questions are the part of evaluative questions.

8. Preparation of Questions

A topic has been taken from class-X english book, prescribed by THE BOARD OF SECONDARY EDUCATION, Odisha, for preparation of different types of questions. The name of the book is ‘A Model English Reader’ and the name of the topic is “At The High School” by M.K. Gandhi.
Different types of questions have been prepared on the basis of their nature, objectives and the demand of the time /situation. The examples of such questions are given below:

(A) Classification of questions on the basis of their nature

Natural Vs. Formal Questions

Natural questions:
This type of questions may not be asked artificially. This type of questions naturally come to the mind during the course of action and accordingly one asks such questions.

Formal questions:

1. What was more important for Gandhiji-Winning prizes or building character?
2. What pained Gandhi so much?
3. How was the fine exempted in the end?
4. What were Gandhiji’s views on hand writing?

Fact finding Vs. Interpretational questions

Fact finding type questions:

1. In which standard did Gandhi get scholarship?
2. How much was Gandhi fined?
3. What was the name of Gandhiji’s Sanskrit teacher?

Interpretational questions:

1. Did Gandhi change his views in later life and why?
2. Why did the Sanskrit teacher think that it was necessary for Gandhi to study Sanskrit?
3. Why was Gandhi grateful to his Sanskrit teacher?

Memory Vs. Recognition question

Memory questions:

1. Was Gandhi good at studies in his school?
2. Did Gandhi like cricket and gymnastics?

3. What did Gandhi say about Sanskrit teacher?

Recognition questions:

1. In standard sixth Gandhi obtained the scholarship of rupees –
   a) Rs.10/-
   b) Rs.12/-
   c) Rs.14/-
   d) Rs.16/-
2. From which standard, Sanskrit language was introducted?
   a) Std 3
   b) Std 4
   c) Std 5
   d) Std 6

Detailed Vs. Topical questions

Detailed questions:

1. What was the earlier notion of Gandhi on hand writing?
2. What did Gandhi say about the Persian teacher?
3. Did Gandhi came back to the Sanskrit class?

Topical questions:

1. Why was Gandhi late for his gymnastic class?
2. What tempted Gandhi to sit in the Sanskrit class?
3. Was Gandhi grateful to his Sanskrit teacher and why?

(B) Classification of questions on the basis of their objectives

Essay type questions

1. Describe how Gandhiji changed all his school day notions in his later life?
2. Describe briefly the school days experiences of Gandhiji?

Restricted Short answer type questions

1. Did Gandhi like cricket and gymnastic and why?
2. How much was Gandhi fined and why?
3. Why did Gandhi get to school late?
4. Why did Gandhi consider Sanskrit harder than Geometry?

Objective type questions

1. In which standard did Gandhi win prizes?
2. Who was the head master of Gandhiji's school?
3. Did Mr.Gimi grant Gandhiji's request?
4. How much Gandhiji was fined?
5. In which class Sanskrit was introduced at the time?
6. What tempted Gandhi to sit in Persian class?

(C) Classification of Questions on the basis of demand of the time/situation

Introductory questions

Dialogue among teacher and students:
Teacher- Dear students, when India got her independence?
Students- (The students will give the possible answer)
Teacher- Do you know, who was the champion of Indian freedom movement?
Students- (The students will give the possible answer)
Teacher- Who is our father of Nation?
Students- (The students will give the possible answer)
Teacher- Do you know about his life in high school days, like yours?

Students- (The students will say the possible answer)
After getting the answers of these questions, the teacher will say today we will study about the topic 'At the high school'.

Comprehensive questions

1. Why did Gandhiji jealously guard his character?
2. Why did the school head master make gymnastic and cricket compulsory for the boys of upper standard?
3. Why did Gandhi request Mr. Gimi to exempt him from gymnastic?
4. How did Gandhi realize that his notions were wrong?
5. Why did Gandhi say something about the Sanskrit teacher?
6. How did the study of Sanskrit help Gandhi in his later life?
7. Why was Gandhi grateful to his Sanskrit teacher?

Summary type of questions

1. Gandhiji realized that he had many wrong notions in his school days. Discuss it in the light of the topic "At The High School".
2. Give a brief account of Gandhiji's life in the school?

Evaluative questions

1. In which standard did Gandhi get scholarship?
2. Why was building character more important for Gandhi?
3. What was the fate of Gandhiji's request to Mr. Gimi?
4. Why was Gandhi fined?
5. What was his earlier notion of handwriting?

9. Conclusion

Questioning skill should be used as an important tool for language learning in general and English language learning in specific. The teachers and teacher educators working in the field of language learning should be made aware about the implications of questioning skill for language learning. They should be made aware about the different aspects of questioning skill and the use of questioning skill for development of different aspect of language learning. Steps should be taken to facilitate the use of questioning skill in language classroom in a higher extent. For learning of English as a second language in India, the practice of questioning skill has high relevance.

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The “Bilingual Paradox” Explained: A Review Paper

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A B S T R A C T

The present paper aims at analysing the so-called “bilingual paradox”, providing an insight into the phenomenon by comparing and contrasting the most relevant empirical research which examine the cognitive costs and benefits of bilingualism. Specifically, it takes into account different historical phases and perspectives of study, highlighting the effects of the bilingual experience on cognitive skills and Executive Functions (EFs) in verbal and non-verbal domains. A particular focus is placed on the difference between two cognitive components, i.e. analysis of representation and control of attention, to better understand and define the positive and negative effects of bilingualism. Indeed, current studies have highlighted the importance of considering the joint relationship between different aspects of cognition, for they are affected by the bilingual experience in different ways and lead to different outcomes in linguistic and non-linguistic tasks.

1. Introduction

Nowadays, with more than half of the world’s population speaking at least another language, considering the relevance of dialects too, it can be claimed that bilingualism represents the default state of language competence, rather than the exception. That is to say, more than half the world's population lives with two or more languages. Bilingualism is found in all parts of the world, at all levels of society, in all age groups. Moreover, as Grosjean points out, even in countries with many monolinguals, the percentage of bilinguals is high (Grosjean, 2010). Accordingly, in the last decades, the phenomenon has received attention from different fields of studies, i.e. educational, cognitive, neurolinguistics, psycholinguistics etc. with the aim of providing an answer to one main question: which are the effects of bilingualism? The present paper investigates different historical phases and perspectives of study of the so-called “bilingual advantage”, providing an insight into the phenomenon by reviewing the most relevant contributions which examine the cognitive costs and benefits of bilingualism. Specifically, it investigates the effects of the bilingual experience on cognitive skills and Executive Functions (EFs) in verbal and non-verbal domains. A particular focus on the relevance of differentiating between analysis of representation and control of attention is included since it leads to what has been defined as the “bilingual paradox”, i.e. different outcomes in linguistic and non-linguistic tasks. Indeed, current studies have highlighted the importance of considering the joint relationship between different aspects of cognition for they are affected by the bilingual experience in different ways.

2. Bilingual advantage? The historical perspective

From a close look at the literature on bilingualism and intelligence over its long history, two contrasting assumptions can be delineated. The “additive effects” phase started in 1962, when

the most influential work on bilingualism was published. Indeed, Peal and Lambert's contribution (1962), *The Relation of Bilingualism to Intelligence*, paved the way to a number of important studies questioning the validity of previous research focused on bilingual disadvantages. Recent literature, improving on the earlier methodologies, shows that bilingualism could have a positive effect on cognitive development. Specifically, the main areas where the bilingual experience has been proved to have positive outcomes concern the cognitive skills involved in language learning processes such as speed of processing, Working Memory (WM), Theory of Mind (ToM), and Executive Functions (EFs) in general (see Bonifacci et. al., 2011; Bialystok, 2009).

Nonetheless, prior to 1962, the mainstream concept among scholars and lay speakers was that being bilingual could be detrimental from a cognitive and psychological point of view. The contrasting opinions, characterising the two historical phases on the effects of bilingualism, are conveyed in these representative assumption taken, respectively, from the negative and additive effects research. Hakuta et al. (1987) report the following statement from George Thompson's (1952: 367) American textbook on child psychology:

> There can be no doubt that the child reared in a bilingual environment is handicapped in his language growth. One can debate the issue as to whether speech facility in two languages is worth the consequent retardation in the common language of the realm.

On the other hand, Elizabeth Peal and Wallace Lambert (1962), in reporting the aforementioned study of bilingual children in Montreal, describe their typical subject as:

> A youngster whose wider experiences in two cultures have given him advantages which a monolingual does not enjoy. Intellectually his experience with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, a more diversified set of mental abilities… In contrast, the monolingual appears to have a more unitary structure of intelligence which he must use for all types of intellectual tasks (p. *20*).

Thompson's statement and its inherent contradictions can be interpreted as a dramatic example of a superficial approach to such a complex phenomenon. First, when dealing with empirical research on bilingualism, different degrees and types of bilingualism need to be taken into account. Second, current studies have highlighted the importance of considering the joint relationship between different aspects of cognition, which are affected by the bilingual experience in different ways. Specifically, as it will be further evaluated in the following sections, the two main cognitive components, namely analysis of representation and control of attention, lead to cognitive costs and benefits depending on the extent to which they are involved in the specific task under investigation.

3. The Bilingual Disadvantage in Verbal Tasks

Despite the substantial advantages in EFs reported in bilinguals, the literature investigating the effects of bilingualism has also reported a series of cognitive and linguistic processes where bilinguals are seen to perform poorly compared to monolinguals. Specifically, the most important disadvantages related to the bilingual experience concern lexical retrieval, verbal fluency, and language proficiency. However, it is important to highlight that most of the experiments employed in these studies are based on response times and have neural correlates.

It is well documented that bilinguals control a smaller vocabulary in each language compared to monolinguals. As Bialystok points out, this is particularly important given that vocabulary size is a central measure to assess children's progress in language development. Specifically, a richer and more refined vocabulary reflects a better understanding of the language under investigation. Nonetheless, developmental research has demonstrated that bilingual children control a smaller vocabulary in each language than their monolingual peers (e.g. Oller and Eilers, 2002). Bialystok and Feng (2009) confirmed these findings by combining results from a standardised Peabody Picture Vocabulary Test score of monolingual and bilingual children aged between 5 and 9 years old, who had participated in a number of studies for several years. The difference between bilingual and monolingual children was confirmed in each age group and the vocabulary gap was constant through the sample as the analysis showed no interaction of age and language group.
The same scenario is found in adults even though the measures employed do not concern vocabulary size but rather access to vocabulary or lexical retrieval. During picture-naming tasks, for instance, reaction times have been observed to be slower for bilinguals immersed in their L1 environment and for those living in the L1 environment (Gollan et al., 2008; Ivanova & Costa, 2008). Moreover, bilinguals have also been reported to have longer reaction times in verbal fluency tasks, where they are asked to produce as many exemplars as possible within a given category or given a first letter (e.g. Sandoval et al., 2010), in semantic decision tasks (e.g. Proverbio et al., 2007). In addition, bilingual have been reported to experience more tips of tongue, demonstrate poorer word identification through noises and experience more interference in lexical decision.
It has been argued that, on the basis of the bilingual deficit found in all these studies, there is the interface from other competing languages. Costa (2005) points out that manipulating the relationship between the words into the two languages may change bilingual performance, for example, by controlling the cognate value or adjusting word frequency.
Bialystok (2009) maintains that the bilingual disadvantage in lexical access and retrieval persists with aging. In order to confirm this hypothesis, she administered three tasks to assess verbal knowledge and retrieval: an English vocabulary test and two tests of verbal fluency. What was particularly interesting about the design of tasks is that the author decided to substitute the drawings that they were supposed to name with verbal definitions. The assumption was that accessing words would be more demanding from abstract definitions rather than concrete drawings, where a contextual support can be found. The findings confirmed bilinguals' worse performance compared to monolinguals in both age groups.

4. Different Accounts for the Bilingual Disadvantage

As already argued, the major problem observed in the early studies on bilingualism is that they failed to control the type and degree on bilingualism since the criteria used to distinguish between bilingual and monolingual groups were not reliable. For instance, they were classified on the basis of their parents' surnames, place of residence, and parents' birthplace (Brunner, 1929). The other fundamental deficit of previous literature, highlighting bilingual disadvantages from a cognitive points of view, deals with type of task used to assess bilinguals' performance. That is, they mainly assessed bilinguals' verbal abilities which, as previously debated, lead to costs for bilinguals being the type of task employed of fundamental importance.
Nowadays, thanks to an improved methodology and a broader knowledge of the phenomenon object of investigation, it is not surprising that bilinguals performed poorly than monolinguals in the majority of the studies reviewed. Indeed, current studies shed light on the bilingual disadvantage observed resorting to more refined and detailed accounts. A number of researchers

support the aforementioned assumption that it is the cross-language interference to cause bilinguals' poor performance (e.g. Rosselli et al., 2000, Sandoval et al., 2010). However, they notice that bilinguals show poorer performance on certain tasks, such as semantic fluency tasks, and no difference compared to monolinguals on letter fluency tasks.

To account for these differences, an alternative explanation has been propounded, that is the "Weaker Links Hypothesis" (Gollan et al., 2008). It states that as regards lexical retrieval, the disadvantage is due to the fact that each individual lexical item is used less frequently by bilinguals compared to monolinguals of the same language used in experimental settings. Therefore, this explains why the lexical items within a language are less strongly connected in bilinguals than in monolinguals. To support this hypothesis, Gollan and colleagues demonstrated that bilinguals poorer performance occurred, specifically, with low-frequency words compared to high-frequency words, especially in their non-dominant language. Moreover, they also found that these frequency effects were attenuated in older participants, supporting the claim that frequency counts in the lexicon of bilinguals may be lower. This explanation comes from bilingual language modelling where the retrieval effects are simulated in a connectionist network. That is to say, the associative networks between words and concepts are distributed across two (or more) languages, making the association less practiced and less fluid.

On the other hand, Hernandez and Li (2007) have advanced a different explanation to account for the bilingual disadvantage in lexical retrieval. Indeed, they propose an explanation involving the age of acquisition of the vocabulary in each language, with the different performance on behalf of bilinguals depending on the age of the L2 acquisition. In addition, there are other views propounded to explain the reduction in lexical retrieval referred to the aforementioned conflict created by the competition between the item in the target and non-target language, which is still available in the bilingual lexicon (Green, 1998). This competition requires longer times to access the lexicon as a mechanism for controlling attention to the target language and for inhibiting the non-target one needs to be activated. This conflict is generally resolved by the executive processes for control, attention, and switching.

5. Language Processing: Monolingual and Bilingual Brain

Neuroimaging studies have found support to the idea that bilinguals and monolinguals process their native languages differently in lexical retrieval, although there is no common agreement on the brain regions involved, distinguishing monolinguals and bilinguals. Park et al. (2012) observed greater activation in the bilingual participants for both L1 and L2 compared to monolinguals in lexicon decision tasks. In particular, bilinguals involve more the left middle and superior occipital gyri and the right middle occipital gyrus whereas monolinguals showed greater activation of the right supramarginal gyrus.

Nonetheless, it has been argued that there may be additional factors to take into account when examining these differences in brain activation. For instance, the participants of the study had different L1s and the bilingual group had been living in the L2 environment for many years, suggesting an effect of L1 attrition. Similarly, a study by Perk et al. (2012) identified five left-hemisphere brain regions that showed greater activity for bilinguals than monolinguals in both of their languages.

As already argued, the type of tasks used in different studies may also account for different brain activation in monolinguals and bilinguals. For instance, Perk et al. used a lexicon decision task instead of the picture naming and word reading tasks. On the other hand, Martin et al. (2012) conducted a go/no-go word length task to measure Event-Related Potential (ERP) responses. Interestingly, the explanation advanced by the researchers for bilinguals slower lexical access is

that they automatically process semantic information in both languages even when it is not needed. Participants were required to respond to the pseudowords determining whether or not they were more than five letters long, ignoring the real English words. The access to semantic information was not necessary for the task. However, bilinguals were reported to always process the semantics of English words, while monolinguals showed no difference between primed and unprimed words. Accordingly, the study suggests that bilinguals delay in the lexical decision due to the stage of semantic analysis always occurring.

What is crucial to highlight about the reviewed studies on the differences between monolingual and bilingual language processing is the evidence they provide to the claim that bilingual experience reshapes speakers' linguistic system as a whole. In other words, apart from explaining bilinguals' poorer performance in certain tasks, these studies demonstrate that bilinguals are not two monolinguals put together in that they present a unique cognitive system, reshaped by the bilingual experience. Grosjean (1985, 2006) was the first to propound the view that bilinguals do not simply add an L2 repertoire to their original one. The concept is also in line with the dynamic system theory by De Bot and colleagues (2007), according to which a speakers' linguistic system encompasses all languages known and is an ever-changing identity. Differently from the linear additive approach to language development, the theory posits that language development is a dynamic system comprising a set of variables that interact with each other and continue changing throughout individuals' life.

It has been claimed (Higby et al., 2013) that the dynamic system theory could account for both the positive and negative effects of bilingualism in that it explains the unique characteristics of the bilingual language processing. Indeed, the idea that multilinguals have a single linguistic system involving different linguistic repertoires is supported by a series of studies of cross-linguistic interference. These studies have found out that bilinguals tend to resolve differences in their multiple languages by forming a set of intermediate representations that appear dissimilar from those of monolinguals in the same languages. This claim has been supported by empirical evidence in different areas such as in lexical category boundaries (i.e. Ameel et al., 2009), use and interpretation of grammatical subject (i.e. Tsimpli, Sorace et al., 2004), and colour perception (Athanasopoulos et al., 2010).

6. Analysis and Control: the Bilingual Paradox Explained

To find a unique explanation that accounts for both the advantages and disadvantages observed in bilinguals, in the different cognitive domains examined so far, is not an easy task. Bialystok (2009) suggests that the central conflict on the basis of bilingual language processing and production could explain the enhancement in executive control on one hand and, the slower lexical retrieval on the other. Indeed, it compromises lexical access in that, as already discussed, it is more effortful and enhances executive control through its continuous involvement in language production. In terms of memory there is a little impact but, since memory performance relies on either linguistic or executive processing, monolinguals and bilinguals will perform differently depending on the type of task used.

Besides, the fact that linguistic and non-linguistic processing are controlled by networks of activation (Abutalebi and Green, 2007) entails that bilingualism affects the entire brain processing, with consequences on the linguistic and non-linguistic cognitive aspects discussed. Besides, bilinguals have been reported to resolve verbal conflicts activating two areas that monolinguals use to resolve non-verbal conflicts, including Broca's area. Instead, another study by Bialystok et al. (2005) revealed that to resolve verbal conflicts, bilinguals have more resources (i.e. Broca's area) as well as more efficient resources (i.e. other frontal areas).

Therefore, the bilingual experience seems to lead to great benefits in non-linguistic processing and to costs in language production.

Bialystok and Ryan (1985) provided an interesting explanation to account for the positive and negative effects of bilingualism, reported in the present paper, moving performance in the opposite direction. On average, bilinguals have been seen to perform poorly compared to monolinguals in tasks based on the rapid lexical access whereas they perform more efficiently on non-verbal tasks assessing executive control. To account for this paradox where linguistic experience leads to costs for language processing and benefits for the non-verbal cognitive ability the authors refer to two different components involved: i.e. analysis of representation and control of attention. Indeed, they argue that both components are required for skilled performance in language processing and production and, when they are at different levels, they cannot be integrated properly into fluent performance. In particular, the knowledge base is the representation of information needed to perform in a cognitive domain.

However, linguistic development does not simply rely on the accumulation of knowledge since the increased organisation of that knowledge is needed to support higher levels of performance, that is to say, analysis. The more knowledge becomes organised and structured, the more it becomes explicit and can be manipulated. Therefore, through the process of analysis, knowledge is continually rebuilt by adding new information and by the constant restructuring of it that makes knowledge more abstract and accessible.

Moreover, Bialystok and Ryan claim that information moves along a continuum from implicit to explicit knowledge, with different degrees of explicitness needed to perform certain types of tasks. In this sense, the analysis is responsible for the reforming the organisational structure of information needed to support increasingly complex performance.

As regards the other component, control of attention, it refers to the cognitive procedures employed to access knowledge and carry out the required task. It started to be particularly relevant in the attempt to explain the relationship between explicit knowledge of the language, fluent performance, and MLA. Indeed, the control of attentional processes is fundamental when there is misleading or irrelevant information that needed to be avoided so that the selection of the target information occurs efficiently. Differently from the analysis component, which is domain specific, control of attention is domain general, for it does not reside in a particular knowledge system but in the resource-limited attention mechanism of the mind.

To better understand the role of analysis and control in performance, it is worth reconsidering the aforementioned metalinguistic awareness task administered to children (Bialystok, 1986), where they were asked to judge the grammaticality of sentences. Children's ability to reject an ungrammatical sentence, that is to say, a sentence such as "Apples growed on trees” relies on their representational knowledge of grammar (i.e. analysis of linguistic structures). On the other hand, children were also warned that the only criterion for judging the acceptability of the sentences was whether or not they were said “the right way”, even though there might be some sentences that were considered to be “silly”. Accordingly, when a sentence like “Apples grow on noses” is presented, children that were able to ignore the semantic anomaly and still judge the sentence as acceptable relied on their control of attention. Indeed, the salient anomaly acts as a distractor that needs to be inhibited to focus attention on the formal structure of the sentence.

Thus, the two components involved explain why in tasks where both analysis of representation and control of attention bilinguals and monolinguals perform differently. Specifically, they are equally successful at determining whether a sentence is correct or not but bilinguals are better at dealing with a grammatical but semantically anomalous sentence. This is due to their more

efficient use of the control of attention component, fundamental where inhibition of the non-relevant information is involved.
On the other hand, as discussed in the present work, bilingualism also leads to costs in cognitive performance. The difference between the tasks that lead to a deficit or advantages for bilinguals can also be interpreted in light with the analysis and control theory advanced by Bialystok and Ryan. All the tasks where bilinguals have been reported to perform poorly, that is lexical access tasks, involve rapid retrieval of a lexical item from semantic memory. The most important factor which determines how fast and how efficiently this retrieval occurs is the nature of the representational base in semantic memory. In other words, the better and more explicitly the linguistic and conceptual representations are organised, the easier it will be to retrieve specific items. However, the authors argue that while there is no reason to assume that bilinguals have less defined and organised representational systems, there is a reason to assume that bilinguals' representational systems for each language are less well connected to the conceptual system. Indeed, bilinguals use each of their naming options less often than monolinguals with the consequence of having a less efficient and fluent access to the items. Moreover, bilinguals poorer vocabulary in each language diminishes the representational base from which performance in these tasks proceeds.
In contrast, all the studies reported where a bilingual advantage was observed mainly rely on aspects of executive control. Thus, it can be argued that both, analysis of representation and control of attention, are involved in linguistic and non-linguistic tasks but the different performance between bilinguals and monolinguals is due to the different emphasis of each component. Thus, the general disadvantage for bilinguals in representation and the general advantages in control determines performance in these paradigms.
Nonetheless, the authors state that in fact, it would be more precise to claim that verbal and non-verbal tasks rely on the interaction of both components rather than mainly on one or the other. This interaction is particularly evident in linguistic tasks that also carry significant demands for executive control. Thus, it can be argued that Bialystok and Ryan’s model accounts for a wide range of cognitive tasks including different domains and levels of skilled performance. That is, every single task we perform depends on how efficiently we manage to use both components to support performance. However, analysis of representation is specific to a domain while control of attention and executive procedures for monitoring information, conflict resolution, and task switching are more advanced for bilinguals and these processes concern all domains of expertise. Accordingly, the model provides a reasonable account for learning and development for language ability.

6.1 Analysis and Control in Metalinguistic Tasks

Another research by Friesen and Bialystok (2012) examines the relative contribution of language knowledge on one hand and executive control ability in metalinguistic tasks. It has been argued that ML tasks, unlike the reviewed linguistic tasks, require to access both attentional processes and linguistic knowledge in different extents. Again, the findings are consistent with the already discussed general framework of control and language analysis as originally proposed by Bialystok and Ryan (1985). What is more, through a number of different tasks that vary with regard to linguistic and metalinguistic demands, the authors were able to focus on the level of metalinguistic development in bilinguals. Indeed, the study provides additional evidence to understand the impact of each component and how analysis and control jointly affect MLA.
In particular, they demonstrated that the two most important factors affecting bilinguals' performance are the nature of the task demands and the degree of bilingualism. In the Wug test

(Berko, 1958), children need to apply English morphological rules to nonsense words. It does not make a high demand on the executive control as there is no salient distracting information to ignore. Instead, it requires a high level of English morphological knowledge. Bilingual positive effects, here, were only observed with balanced bilinguals, that is participants with an equal level of proficiency in both languages. No additional advantages were recorded in participants becoming bilinguals with dual language exposure. Therefore, the better performance on the Wug test was due to the initial increased insight into the relationship between language's form and meaning and not by improving executive control.

On the other hand, in the grammaticality judgement and verbal fluency tasks, requiring high levels of executive control, the study showed that the superior executive control skills developed by bilinguals enable them to compensate for the weaker language skills. Moreover, the greater bilingual experience was the factor which determined the improved mechanism control observed.

7. Conclusion

The main aim of the discussion developed in the present paper was to disentangle the complex argument of the so-called bilingual advantage through evidence coming from several empirical studies, each employing a particular methodology to address specific questions, in different historical phases of the research on bilingualism. It can be concluded that since bilingual language processing relies on a series of networks, it is not possible to identify one single cause accounting for the different effects of bilingualism.

As regards the research conducted before 1962, the negative effects reported where mainly due to socio-political reasons, i.e. discrimination towards immigrants and their bilingual children, and a weak and ineffective methodology where socio-economic status, the type of bilingualism, and type of task employed were ignored or overlooked. On the whole, the positive effects observed in a number of EFs such as inhibition, control, attentional networks, WM, ToM etc. and the negative effects found in lexical retrieval, verbal fluency, and vocabulary size can all be considered as part of the complex, unique cognitive structure of bilingual language processing.

Thus, any attempt to define this system as better or worse compared to the monolingual system would fail, in that, the language deficit on one hand and the control advantages on the other constitute the peculiar aspects of the bilingual mind, which makes it different from the monolingual one. Accordingly, what is worth highlighting is the unique nature of bilinguals, together with their unique cognitive system, not comparable to two (or more) monolinguals put together. It is important to switch the focus from the benefits and deficits of bilingualism to the different way of learning and processing knowledge of the bilingual mind. Accordingly, to better understand the positive and negative effects coming from the bilingual experience, it is necessary to consider the linguistic system as a whole, its complex dynamics and how managing two or more language involves different cognitive processes which, in turn, affect linguistic and non-linguistic outcomes.

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Between Texts and Subtexts:
Scrutinising the Politics of English Textbooks in Secondary Classrooms of Bengal

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A B S T R A C T

English language teaching in India in the post- Independence phase has chiefly been governed by policy reformations and curricular revisions. In West Bengal too, such debates and discussions charted the course of evolution of this discipline thereby revealing the subterranean nexus of dominant socio-political ideologies. The last few decades have witnessed a conflict between Leftist administration and forces of globalisation; a conflict that characterised curricular construction and changes. The curricular revision of English in the elementary, secondary and higher secondary levels of school education in Bengal coincided with the political overturn in the State and resulted in replacement of the three decade old series of English textbooks by a skill-based syllabus modelled on globally recognised necessity for communicative competence and outcome-oriented, functional language learning. The present paper aims to probe into the play of hegemonic forces by a textual and sub-textual study of the English textbooks circulated at present in the Secondary level of public education in Bengal, examining the objectives of the course content, pedagogic principles and achieved outcomes.

1. Introduction: Politics of Curricular Ideologies

In the Introduction to his seminal text "The State and the Politics of Knowledge", Michael Apple clarifies:

> Formal schooling by and large is organized and controlled by the government. This means that by its very nature the entire schooling process—how it is paid for, what goals it seeks to attain and how these goals will be measured, who has power over it, what textbooks are approved, who does well in schools and who does not, who has the right to ask and answer these questions, and so on—is by definition political. (p. 1)

This statement not only interrogates and scrutinizes the relationship between curriculum, ideology and administration but also underlines the hegemonic discourses embedded in a curricular framework propagated by any governing institution at any point in time. Investigating the politics of state-ideology, power and education, Apple was one of the forerunners in critical analysis of course curriculum and its components viz., Syllabus (content), Methodology, Evaluation and Assessment. Viewing curriculum as the apparatus for contesting ideologies, Apple investigated the socio-political undercurrents of an "educational landscape" (p. 16) reflected in the syllabus of the curriculum and dominant ideologies as propagated by the textbooks. English language curriculum in India had always been the crucible for interplay of

hegemonic forces resulting in copious changes in language policies and syllabus content, especially in the post-Independence phase. Located at the "heart of British India"(p. 127), as Howatt and Widdowson(2018) remarked, Bengal has always had a major role to play in the nexus of such hegemonic forces operating in the imperialist framework; especially those related to teaching and learning of English. "English education was associated with one of the most productive periods of Bengali culture- the Bengal Renaissance of the mid-19th century, which is still seen as a defining moment for the consolidation and articulation of Bengali identities" (Chakravarti, 2008, p.38). In the post-Independence phase of debates and discussions regarding teaching of English, the central concern was "the ideal age for introducing English", and in extension, about framing curricular policies and appropriate methodologies to suit the curriculum (pp. 38-39). Oscillating between tradition and modernity, English education in Bengal has been caught in the dichotomy between Marxist ideologies and consumerist forces stemming from surging forces of globalisation, resulting in curricular modifications and course mutations. Noteworthy among such reformative junctures are the Ashok Mitra Commission (1991) that abolished teaching of English at the primary level by introducing the subject/language to learners in Bengal from Class V, the PabitraSarkar Committee recommendation (1999) that reinstated English education from Class II and finally the revision of the ELT curriculum in 2012. A semiotic study of these landmark events in the evolution of English education in Bengal reveals the subterranean socio-political factors that shapes the selection of course content and pedagogic principles of the curriculum.

The curricular revision of English in the elementary, secondary and higher secondary levels of school education in Bengal in the year 2012 coincided with the political upheavals in the State that resulted in replacement of not only the three decade old administration but also an equally old curriculum. The new curriculum was grounded on functional learning of the language and developing a competence among learners to 'apply' the knowledge structures in appreciating literary pieces. The new series of textbooks aimed to develop communicative competence and as opposed to the previous textbooks, the course content was modelled on Constructivist principles "thereby ensuring learners' autonomy" (Blossoms for Class- VIII, 2016, p. 124) and Krashen's theories of Second Language Acquisition (SLA) that advocates learning language by being exposed to an authentic input setting.

2. Research Objectives:

Thepresent articleattempts to study of the dynamics of socio-political factors and pedagogic theories enmeshed in the present English language curriculum in Bengal by analysing the course content of the English textbooks circulated among learners of English as a Second Language in the secondary level schools affiliated to the WBBSE and analysis of its theoretical underpinnings.

3. Background of the Study:

3.1 Evolution of approach and perspectives towards ELT vis-à-vis socio-political context

Commenting on the English textbook landscape of the State, Prof. ParomitaChakravarti(2008) remarks:

> The uncertainty surrounding the status of English in West Bengal state schools is reflected in the textbook content, which constantly dithers between treating English merely as a language to be taught efficiently, through pieces which are 'relevant' to the

> learners' lives and the desire to familiarize students with a smattering of British literature (p. 42).

With respect to ELT in India, Bengal has always had a special niche of its own; a status that remained unchanged in the post Independence phase. All major educational policies in pre-Independence phase of India were centered on Bengal by virtue of the state being the seat of British administration; however, with subsequent shift of power, the "Centre-State tussle over educational administration and management has seen numerous oscillations" (Dhar, 2005. P. 5). In an Overview on School Education in West Bengal (2008), the overall structure of education system in Bengal is clarified thus:

> The Minister-in-Charge of School Education along with Secretary and Secretariat areresponsible for planning and policy making in all matters related to School Education.The Directorate of School Education implements the policies of the government throughthe Inspectorate located at various tires- like districts, sub-divisions and circles…The entire school education system has a dual control (pp. 7-8).

This structure not only delineates the hierarchy that constitutes the educational domain of Bengal, but interestingly, clarifies the autonomy that the Minister of Education of the State enjoys in policy making decisions and curriculum development. Ever since the standardisation of English language by the recommendations of the Kothari Commission (1964-66), curricular experiments on ELT have been conducted in the states of Odisha, Maharashtra and West Bengal.

On June 21, 1977 when the Left Front headed by JyotiBasu assumed power in Bengal, one of the major challenges for the new Government was accounting for the declining economic and neglected educational scenario (Gurung, 2011,p. 2). Simultaneously, English language was located as "a bourgeois marker of class privilege" (Chakravarti, 2008, p. 39) by the Marxist government and in a radical move, it was removed from the primary school language curriculum after the submission of the reports of HimanshuBimalMajumdar Commission (1974-79). Although the justification so provided was that English language learning would impede the learning of Bengali, the reason for the removal of the subject from primary education was distinctly political. "Communist ideological imperative of the Left Front found in English a nexus of elitist values and comprador bourgeoisie ideologies. Thus, as a measure to diminish the importance of English in the new setup, English was introduced at the beginning of High School stage, i.e. Class-VI" (Chattopadhyay2014, p. 133).The abolition of English at the primary levels faced criticism from almost all sectors of the intelligentsia and present day ELT practitioners in Bengal unanimously agree that abolishing the language from the primary level back in 1981 not only maimed the communicative competence of students using the global lingua franca but disfigured the very educational fabric of the state. Later, following the recommendations of Ashok Mitra Commission (1992), "English began to be taught in Class-Vin government-run schools from 1994". (Mandal&Behera, 2017). Towards the end of the millennium, the state administration based on Leftist ideologies faced a crisis in the form of twin forces of economic liberalization and globalization and interestingly, the Government that had rejected English from primary level school education on the grounds of political ideologies that oppose imperialist and capitalist interventions could no longer ignore the American socio-linguistic penetration of the economic and cultural fabric of the nation. With rapidly increasing employment opportunities in BPOs and KPOs, learning and speaking the language was becoming indispensable. Acknowledging this growing significance of English language in the

socio-economic context, English was re-introduced at the primary level and later, based on the recommendations of Pabitra Sarkar Committee (1998), English was introduced in the lower-primary language classrooms. Need to re-examine the existing English textbooks was envisaged and subsequently, during 2003-04, revised textbooks were circulated in the secondary classrooms of schools affiliated to the West Bengal Board of Secondary Education (WBBSE) (Chakravarti, 2008, p. 41). The revision scrutinized the grammar-based syllabus and attempted to replace it by a skill-based syllabus.Kuheli Mukherjee (2017) notes:

> The guiding principle of these new textbooks was that children will naturally learn to communicate in a foreign language if they are presented with examples of that language in contexts which they understand (Krashen in NCF 2005). Listening and speaking skills were emphasized in the first two grades (p. 127).

In later years, the assessment of the course content and probing into areas like pedagogic principles, methodology and content design continued; as a result of which textbooks aligned with the recommendations of NCF 2005 were introduced in 2008.

The new *Learning English* textbook series concentrated on “oral communication” and contained tasks and exercises for students to practice conversational skills “either individually or in pairs, or in groups specially guided by the teacher” to develop abilities of using the language in real situations and fluency among the language users (*Learning English* VIII). However, despite such attempts, ELT in Bengal continued to swivel around vacillating treatment of the language owing to its socio-political associations. As a result, there was a huge gap between the rationale of the curricular modification and its resultant outcome. The syllabus design as well as the revised textbook content bore the imprints of a clear lack of understanding of the learners’ needs; the latter generally assumed to constitute the bedrock of “curricular development” in a “sound educational program”(Richards,2017, 51). Due to this, despite proposed modifications in the textbook content, there was a clear disjuncture between the course design and its practical implications and English, in the revised secondary textbooks continued to remain “foreign in its literary manifestations”(Chakravarti, 2008, p. 42). The Foreword to the 2010 edition of *Learning English* textbook states that the book contains “exercises (that) are sufficiently large in number, well-graded and interesting” but the chapters fail to create identifiable contact zones for the learners. As a result, learners feel detached from the learning content and “English remains a colonial language in these textbooks...It becomes neither a modern Indian link language nor an international language of communication. In spite of their progressive, democratic outlook, the textbooks remain out of sync with contemporary Indian reality.” (Chakravarti, 2008, p. 42)

3.2 Research area: Post 2011 English curriculum

The socio-cultural fabric of the state witnessed a radical change in 2011 with Trinamool Congress winning the Legislative Assembly elections and ascending to power in Bengal politics, ending a thirty seven year old administration. In a sweeping move, as radical as the political turnover, ELT curriculum across the state was scrutinised, examined and overhauled. As soon as July 2011, the changes suggested by the Interim Report were considered and the Govt. “stated that they would re-examine the existing syllabus and curriculum for all subjects at all school levels to ‘make them in conformity with the National Curriculum Framework 2005, RTE Act 2009 and modern developments in pedagogy’ (notification no. 849-SE(S)/ES/S/10 M-64/11 dt.20/07/2011, GoWB)” (Mukherjee, 2018, 127-128). Besides Indian Institute of Management

Calcutta working on the review of the existing language curriculum in schools, British Council, India also assisted in evaluation of the existing curricular system and suggesting changes. The Report on English Teaching in Government Primary Schools: An Evaluation of the West Bengal-British Council Program (Pratham-ASER Centre) published in September 2011 records:

> The focus has been on designing an English syllabus, rewriting the textbook series at primary levels, and providing the new graded text books. The effort has been led by Ray MacKay and a team of 10 resource persons, identified by the West Bengal Board of primary Education, in consultation with the British Council. (p. 1)

The team conducted a field survey in 16 districts of West Bengal over 43 days in 2011with the aim to study the fault lines in the curriculum and pedagogy of ELT and find contextually appropriate solutions to those problems. As a result of this increased examination of the curricular framework, the whole set of English textbooks (*Learning English* Series) that had been used for a decade was replaced by a new series of books that were based on the Govt.'s stance of globalising the syllabus and stress on honing practical skills associated with ELT . As stated in Recommendations of the Expert Committee on School Curriculum and Syllabus, GoWB (Mukherjee, 2018, pp. 14-15), the reason behind such drastic change was: "…the disappointing performance of West Bengal overthe last three decades in the national rankings established by the EducationDevelopment of India (EDI)"(Mukherjee, 2018, p. 128). It identified over-dependence on "rote learning" in primary and secondary schools, lack of a well-designed curriculum that catered to changing needs of language learners and above all, the lack of proper pedagogy that would accommodate updated teaching methodologies and "national level educational policies"(p. 128). This revision in the textbook content not only marked a significant departure from traditional modes of language learning methodologies and embracing global concerns for a functional, communicative syllabus but also unveiled "a complex system of facts and codes" that constitute and "govern the educational process in West Bengal" (Dhar,2005, p. 7).

4. Research and Analysis

4.1 Differential study of English textbooks: Course Objectives and Theories

Based on constructivist theories of language acquisition and 'Natural Approach' of classroom pedagogy that harps on providing "comprehensible input" to language learners, the new curriculum of English education is significantly different from its predecessor (Krashen, 2009, p. 138). Unlike the *Learning English* textbooks that provided a vague idea regarding using the text "for developing communicative skills", the new textbook series present an elaborate guideline for using the books, discussing at length the learning objectives of all the lessons, the micro and macro skills targeted by the activities and exercises at the end of each lesson and as constituents of the entire course. The books so circulated in the Secondary language classrooms were titled *Bliss* (for classes IX and X) keeping in mind the need of young learners "to extend their knowledge and to explore their aptitudes" (Preface to *Blossoms for Class-VIII*, 2016). "The [new] curriculum of English as Second Language (ESL) of WBBSE therefore aims to instil in the learners both Basic Interpersonal Communicative Skills (BICS) as well as Cognitively Advanced Language Proficiency (CALP)" (*Bliss*, 2015, p. 106).

In tandem with the recommendations and vision of RTE Act 2009 and NCF 2005, these books "aimed to expose the learners to the thoughts and writing style of the world's best writers and

thinkers" (v). In the Foreword to *Blossoms* for Class VIII it is clearly noted that these books, developed by an expert committee (constituted by the GoWB) have formulated these books in an attempt to shift from the conventional approach of teacher-centred language education to a student-directed method. Including an assortment of prose and poetry, these books address the linguistic skills of learners "through the reading of literature" (Bliss, 2015, p. 107). The rationale of the chapters and the associated exercises in the new book series are underlined accordingly:

> Efforts have been made to ensure that acquisition of various language skills takes place effortlessly. Holistic or top-down approach through story-reading, that promotes visual recognition of whole words or chunks of language, has been complemented by bottom-up approach to letter-sound mapping and print-decoding (124).

Unlike (as noted earlier in this paper) the *Learning English* series that failed to familiarise the language or the learning context to the learners by its selection of European canonical literary pieces, *Bliss* provides a context that is global and yet, one that the learners in secondary level schools of Bengal can relate to. The first lesson of the text (*Bliss for Class- IX*) narrates the humorous story of a certain forgetful Bhola Grandpa by Manoj Das, an acclaimed bilingual author from Odisha; the setting of the story as well as the characters generate a sense of familiarisation among the learners who feel comfortable with the course. Another observation regarding course content is that in stark contrast to the previous books, the selection of lessons is not limited to canonical writings in English but includes text excerpts from American and Australian poets and novelists as well. This observation foregrounds the political ideologies of present time, one that debunks leftist ideologies and embraces pro-consumerist, neo-colonialist, neo-capitalist significance of English language learning.

Escalating forces of consumerism was not only sketching a new face of market economy but consolidating the position of English language as the indispensible medium of communication in the global map as well. Owing to the dichotomous position of English language in the educational setting in a Leftist administration that was coming to terms with changing socio-economic scenario, the *Learning English*texts for Classes IX and X simply targeted "basic technicalities of the language" and provide for the learners "a competence to write correct simple sentences to express her (sic) thoughts and imagination" mentioning in a single sentence how communicative skills were desirable. (Foreword to Learning English for Class IX, 2009)This indecisive and hesitant stance of the administration vis-à-vis ELT led to an ill-constructed curricular framework that half-heartedly addressed the linguistic needs of the learners in Bengal and failed to provide adequate guidelines to the teachers as to using the texts towards observable learning outcomes. The new textbooks on the other hand clearly delineate the central objectives of the curriculum: developing communicative competence among the learners by providing them a learning environment that is activity-based and learner-centred (Bliss, 2015, p. 106-107). Drawing from theories of constructivism (Piaget, Bruner, Dewey and most significantly, Vygotsky)grounded on active learning and learners' autonomy; the new textbooks of English reassess the role of a language teacher as a facilitator in the learning process and the role of a learner who is directed towards independent construction of knowledge structures. Constructivist Learning "is based on students' active participation in problem-solving and critical thinking regarding a learning activity which they find relevant and engaging." (Brinner,1999, as cited in Jordan, 2004). James Pelech (2010), in his comprehensive analysis of Constructivist teaching, notes three components that characterise the application of constructivist principles in language learning, namely, cooperative learning, questioning and authentic learning.

The new book series are designed in a way that the lessons encourage cooperative learning and construction of knowledge (linguistic structures) in an autonomous way. The exercises at the end of each chapter in the book are designed in a way that learners gain a theoretical understanding of the grammar structures through application of those principles, in a deductive method. On an average, there are more than six activities at the end of each chapter in *Blossoms* catering to all the four macro skills of language, engaging the learners in a collaborative, engaging environment. In the secondary level text *Bliss*, however, the exercises are limited and the instructions to engage in those activities and exercises are less elaborate as compared to the ones in *Learning English* series that divide the exercises into components that test the learners' comprehension skills, grammar and vocabulary and most significantly, writing skills. The 'communicative tasks' require the teachers' intervention and do not contribute much to the development of learners' speaking skills.

Pedagogic principles underlying *Blossoms* and *Bliss* include Krashen's theories of Second Language Acquisition (SLA), especially the Input Hypothesis according to which the learner must be exposed to a linguistic input that is of a higher level than the present ability. Krashen himself notes: "The input hypothesis makes the following claim: a necessary (but not sufficient) condition to move from stage i + 1 is that the acquirer understand input that contains i+ 1, where "understand" means that the acquirer is focused on the meaning and not the form of the message" (Krashen, 1982, as Cited in Shannon, 2012, p. 21). This justifies the frequency of the highlighted (referring to level of difficulty) words and vocabulary in the chapters of the texts. One of the ideas generated by the Input Hypothesis is the development of communicative competence among learners "after enough competence has been developed by listening and understanding" (Krashen, 2009, p. 27); *Bliss* however, despite the claims in the Foreword to the text, contains no specific tasks or activities that would engage the learners in listening or speaking skills. This observation underscores the broader analysis of the 'aporia' of ELT in the context of Bengal's secondary education; the observation and analysis forms a major argument in my Doctoral thesis.

5. Conclusion:

Over the last few decades, there has been a paradigmatic shift in approach and perspectives towards ELT all over the world, with a major collaborative enterprise undertaken by curriculum designers, language analysts, policy makers, administrators and language teachers to decode the socio-political ideologies embedded in the fabric of language teaching principles and attempt to design a language curriculum that would combine the appropriate pedagogic principles for effectively addressing the course objectives. Such enterprise revealed the dominance of socio-political cross-currents constructing contemporary curricula. The present paper delved into the nuanced nexus of political undercurrents in pedagogic appropriations through a close scrutiny of the English textbooks in the secondary level public education of West Bengal and attempted to present a sub-textual reading of the policy reformations and revisions related to teaching the language.

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Negation in Assamese

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A B S T R A C T

Negation refers to the process of denying something totally or partially. The traditional studies of Assamese negation are usually confined only to the verb forms, while it is seen at noun and adjective levels as well. Assamese negation process shows some unique characteristics which are not common in other the modern Indo-Aryan languages. Assamese negation may be an instance of non-Aryan influence, as in the process of its formation and development, Assamese has come into contact with various non-Aryan languages. It may be an instance of Tibeto-Burman influence on the language. This paper makes an attempt to study of Assamese negation system in detail.

1. Negation in Assamese

Assamese is a literary language recognized by the eighth schedule of the Indian Constitution and the state language of Assam. Though originates from Sanskrit, Assamese grows amidst different non-Aryan languages. Dr. Banikanta Kakati calls "Assamese is a small island in the midst of non-Aryan languages." Due to language in contact, Assamese and other non-Aryan languages are seemed to be influenced by one another.

Negation is a process almost common to all languages. It is a form of affirmation by denial. Collins Cobuild English Dictionary defines negation as- "the act of causing something not to exists, or the state of not existing". In other words, it refers to the process of denying something, either totally or partially. This paper studies the Assamese negation process, the negation done at verb as well as noun and adjective level.

2. Negation of Assamese Verbs

The traditional studies on Assamese negation are confined only to the verb form. Depending upon whether the action is completed or not, Assamese verbs are divided into two broad divisions, viz.- finite and non-finite verbs. The process of negation of these two types of verbs is discussed below.

2.1 Negation of Finite Verbs

Finite verbs are those words which can indicate completion of meaning and structure. The negation of finite verb is done by prefixing *{nɒ}* with the verb. For example-

Affirmative	Negative
kɒr-õ 'do' do-1	*nɒ-kɒr-õ* 'do not do' neg-do-1

kɒr-a 'do' *nɒ-kɒr-a* 'do not do'
do-2 fam neg-do-2 fam

kɒr-ɒ 'does' *nɒ-kɒr-ɒ* 'does not do'
do-3 neg-do-3

If the verb begins with vowel sound, then only '*n*' is used. The *{nɒ}* has six allomorphs, viz.- *[nɒ]*, *[ni]*, *[ne]*, *[na]*, *[nu]* and *[no]* .

The way in which the six allomorphs of *{nɒ}* form negation are illustrated below in tabular form-

Negative Allomorphs	Affirmative	Negative
[nɒ]	*pɒr-il* 'fell'	*nɒ-pɒr-il* 'did not fall'
[ni]	*kin-õ* 'buy'	*ni-kinõ* 'donot buy'
[ne]	*k^{h}el-e* 'plays'	*ne-k^{h}ele* 'doesnot play'
[na]	*za-j* 'goes'	*na-zaj* 'doesnot go'
[nu]	*p^{h}ul-e* 'blooms'	*nu-p^{h}ule* 'doesnot bloom'
[no]	*ħud^h-e* 'asks'	*no-ħud^{h}e* 'doesnot ask'

Table No 1: Illustration of the use of negative allomorphs

If the verb begins with the vowel sound /*a*/ sometimes *[ne]* is used in place of *[na]*. For example-

k^{h}a-il-e *na-k^{h}a-il-e / ne-k^{h}a-il-e*
eat-past.3 neg-eat-past 3
'ate' 'did not eat'

pa-il-e *na-pa-il-e / ne-pa-il-e*
get-past.3 neg-get-past 3
'got' 'did not get'

ga-il-e *na-ga-il-e / ne-ga-il-e*
sing-past.-3 neg-sing-past-3
'sang' 'did not sing'

From the view point of structure, Assamese finite verbs can be divided into two divisions- Simple Verb or Mono-constituent Verb and Compound Verb or Poli-constituent Verb. Tense and persons play a significant role in formation of Assamese verbs. Depending upon the influence of tense and person, the Assamese simple verbs can be divided into three divisions-

(i) Regular Verb
(ii) Irregular Verb
(iii) Anomalous Verb

2.1.1 Negation of Regular Verbs

Regular verbs are those verbs whose roots show agreement to all tense forms and persons. Regular verbs follow typical conjugation pattern of the language to which it belongs. The regular verbs can take all three tense forms, viz.- present, past and future and all three persons to form affirmative and negative words. The various ways in which root form of an Assamese regular verb takes the tense and person are illustrated below-

Tense	Person	Affirmative form	Negation by Prefixation	Negation by Periphrasis
Simple Present	First Person	*mɔi kɒr-õ* I do-1 'I do'	*mɔi nɒ-kɒr-õ* I neg-do-1 ' I do not do'	
	Second Person inferior	*tɔi kɒr-ɒ* you do-2inf. ' You do'	*tɔi nɒ-kɒr-ɒ* you neg-do-2inf. 'You do not do'	
	familiar	*tumi kɒr-a* you do-2fam. 'You do'	*tumi nɒ-kɒr-a* you neg-do-2fam. 'You do not do'	
	honorific	*apuni kɒr-e* you do-2hon. 'You do'	*apuni nɒ-kɒr-e* you neg-do-2hon. ' You do not do'	
	Third Person	*ħi/tai kɒr-e* he/she do-3 'He/She does'	*ħi/tai nɒ-kɒr-e* he/she neg-do-3 'He/She does not do'	
Present Perfect	First Person	*mɔi kɒr-is-õ* I do-impv.-1 'I have done'		*mɔi kɒr-a-nae* I do-denom.-neg 'I have not done'
	Second Person inferior	*tɔi kɒr-is-ɒ* you do-impv-2inf. 'You have done'		*tɔi kɒr-a-nae* you do-denom.-neg 'You have not done'
	familiar	*tumi kɒr-is-a* you do-impv.-2fam. 'You have done'		*tumi kɒr-a-nae* you do-denom.-neg 'You have not done'
	honorific	*apuni kɒr-is-e* you do-impv.-2hon 'You have done'		*apuni kɒr-a-nae* you do-denom-neg 'You have not done'
	Third Person	*ħi/tai kɒr-is-e* he/she do-imp.-3 'He/She has done'		*ħi/teõ/tai kɒr-a-nae* he/she do-denom-neg 'He/She has not done'

Present Continuous	First Person	*mɔi kɒr-i as-õ* I do-inf. be-1 'I am doing'		*mɔi kɔr-i tʰak-a nae* I doi-inf stay-denom-neg 'I am not doing'
	Second Person inferior	*tɔi kɒr-i as-ɒ* you do-inf. be-2inf. 'You are doing'		*tɔi kɒr-i tʰak-a nae* you do-inf. stay-denom-neg 'You are not doing'
	familiar	*tumi kɒr-i as-a* you do-inf. be-2fam 'You are doing'		tumi kɒr-i tʰak-a nae you do-inf. stay-denom-neg 'You are not doing'
	honorific	*apuni kɒr-i as-e* you do-inf. be-2hon. 'You are doing'		*apuni kɒr-i tʰak-a nae* you do-inf. stay-denom neg 'You are not doing'
	Third Person	*ħi/tai kɒr-i as-e* he/she do-inf. be-3 'He/She is doing'		*ħi/tai kɒr-i tʰak-a nae* he/she do-inf. stay-denom. neg 'He/She is not doing'
Simple Past	First Person	*mɔi kɒr-il-õ* I do-past.1 'I have done'	*mɔi nɒ-kɒr-il-õ* I neg-do-past.1 'I have not done'	
	Second Person inferior	*tɔi kɒr-il-i* you do-past.2inf. 'You have done'	*tɔi nɒ-kɒr-il-i* you neg-do-past.2inf. 'You have not done'	
	familiar	*tumi kɒr-il-a* you do-past-2fam. 'You have done'	*tumi nɒ-kɒr-il-a* you neg-do-past. 2fam. 'You have not done'	
	honorific	*apuni kɒr-il-e* you do-past.2hon 'You have done'	*apuni nɒ-kɒr-il-e* you neg-do-past. 2hon 'You have not done'	
	Third Person	*ħi/tai kɒr-il-e* he/she do-past.3 'He/She has done'	*ħi/tai nɒ-kɒr-il-e* he/she neg-do-past.3 'He/She has not done'	
	First Person	*mɔi kɒr-is-il-õ* I do-impv.-past.1 'I did'		*mɔi kɒr-a n-as-il-õ* I do-denom. neg-be-past.1 'I did not do'

<table>
<tr><td rowspan="2">Past Perfect</td><td>Second Person
inferior

familiar

honorific</td><td>tɔi kɒr-is-il-i
you do-impv. past. 2inf.
‘You did’

tumi kɒr-is-il-a
you do-impv.-past. 2fam.
‘You did’

apuni kɒr-is-il
you do-impv.-past.2hon.
‘You did’</td><td></td><td>tɔi kɒr-a n-as-il-i
you do-denom. neg-be-past.2inf.
‘You did not do’

tumi kɒr-a n-as-il-a
you do-denom. neg-be-past. 2fam.
‘You did not do’

apuni kɒr-a n-as-il
you do-denom. neg-be-past.2hon.
‘You did not do’</td></tr>
<tr><td>Third Person</td><td>ħi/tai kɒr-is-il
he/she do-impv.-past3
‘He/She did’</td><td></td><td>ħi/tai kɒr-a n-as-il
he/she do-denom. neg-be-past.3</td></tr>
<tr><td rowspan="3">Past Continuous</td><td>First Person</td><td>mɔi kɒr-i as-il-õ
I do-inf. be-past.1
‘I was doing’</td><td></td><td>mɔi kɒr-i tʰak-a n-as-il-õ
I do-inf. stay-denom. neg-be-past.1
‘I was not doing’</td></tr>
<tr><td>Second Person
inferior

familiar

honorific</td><td>tɔi kɒr-i as-il-i
you do-inf. be-past.2inf.
‘You was doing’

tumi kɒr-i as-il-a
you do-inf. be-past.2fam.
‘You was doing’

apuni kɒr-i as-il
you do-inf. be-passt.2hon.
‘You was doing’</td><td></td><td>tɔi kɒr-i tʰak-a n-as-il-i
you do-inf. stay-denom. neg-be-past.2inf.
‘ You was not doing’

tumi kɒr-i tʰak-a n-as-il-a
you do-inf.neg-be-past. 2fam.
‘You was not doing’

apuni kɒr-i tʰak-a n-as-il
you do-inf. stay-denom. neg-be-past.2hon.</td></tr>
<tr><td>Third Person</td><td>ħi/tai kɒr-i as-il
he/she do-inf. be-past.3
‘He/She was doing’</td><td></td><td>ħi/tai kɒr-i tʰak-a n-as-il
he/she do-inf. stay-denom. neg-be-past.3</td></tr>
</table>

Future	First Person	*mɔi kɒr-im* I do-fut.-1 'I will do'	*mɔi nɒ-kɒr-õ* I neg-do-1 'I will not do'	
	Second Person inferior	*tɔi kɒr-ib-i* you do-fut.-2inf. 'You will do'	*tɔi nɒ-kɒr-ɒ* you neg-do-2inf. 'You will not do'	
	familiar	*tumi kɒr-ib-a* you do-fut.-2fam. 'You will do'	*tumi nɒ-kɒr-a* you neg-do-2fam. 'You will not do'	
	honorific	*apuni kɒr-ib-ɒ* you do-fut.-2hon 'You will do'	*apuni nɒ-kɒr-e* you neg-do-2hon. 'You will not do'	
	Third Person	*ħi/tai kɒr-ib-ɒ* he/she do-fut-3 'He/She will do'	*ħi/tai nɒ-kɒr-e* he/she neg-do-3 'He/She will not do'	

Table No. 2: Illustration of negation of regular verbs

2.1.2 Negation of Irregular Verbs

Irregular verbs are those verbs, which do not follow the regular configuration pattern of a language and whose root does not show agreement to tenses and persons. Assamese irregular verbs are- *bɒl* 'lets go', *as* 'be', *t*^{h}*a*k 'stay', *za* 'go'. Though the negation of the irregular verbs are done in a similar way with that of the regular verbs, yet here '*as*' (be) is an exception. In case of '*as*' the negation is done by using a new word- '*nae*' (is not),

mɔi g^{h}*ɒr-ɒt as-õ* I home-loc. be-1 'I am at home'	*mɔi g*^{h}*ɒr-ɒt nae* I home-loc. neg 'I am not at home'

2.1.3 Negation of Anomalous Verbs

The anomalous verbs are those verbs which are in spite of showing agreements to tenses, gets form only in third person. Only accusative and genitive case markers can be used with the subjects of these two verb forms. For example-

mok kɒlɒm lag-e me pen need-emph. 'I need pen'	*mok kɒlɒm na-lag-e* me pen neg-need-emph. 'I do not need pen'
mor zar lag-e my cold need-emph. 'I feel cold'	*mor zar na-lag-e* my cold neg-need-emph. 'I do not feel cold'

2.2 Negation of Non-Finite Verbs

In Assamese, there are total eight non-finite verb forms. The non-finite verbs are tense and person neutral. Like that of the finite verbs, non-finite verbs are also made negative by affixing the allomorphs of the morpheme *{n}*. For example-

Non-finite Verb form	Affirmative	Negative
le/ile	*teõ ahile m ɔi zam* 'If he comes, I shall go'	*teõ nahile m ɔi zam* 'If he does not come, I shall go'
t/ɒt	*tai kowat mɔi ahisilõ* 'I came because she asked me to come'	*tai nokowat mɔi ahisilõ* 'I came because she did not ask me to come'
ote	*teõ kʰaote kɒtʰa kɔisil* 'He was talking while eating'	*teõ nakʰaote kɒtʰa kɔisil* 'He was talking while not eating'
lɔike	*mɔi ɒhalɔike tumi tʰakiba* 'Wait till I come'	*mɔi nɒhalɔike tumi tʰakiba* 'Wait until I come'
a	*tumi ɒhar karɒn ki ?* 'What is the reason of your coming?'	tumi nɒhar karɒn ki ? 'What is the reason of your not coming? '
kɔi	*ubʰɒti zowakɔi ahiba* 'Come so that you can return'	*ubʰɒti nozowakɔi ahiba* 'Come so that you cannot return'
i	*mɔi bʰat kʰai gʰɒrɒlɔi zam* 'After eating rice, I shall go home'	*mɔi bʰat nakʰai gʰɒrɒlɔi zam* 'Instead of eating rice, I shall go home'
bɒl ɔi/ibɒlɔi	*teõ kamto kɔribɒloi sesta kɔrisil* 'He tried to do the work'	*teõ kamto nɒkɔribɒlɔi sesta kɒrisil* 'He tried not to do the work'

Table No.3: Illustration of negation of non-finite verbs

3. Negation at Word Level

In case of Assamese noun and adjective, the negation is seen at word level also. In such cases, negative prefixes or suffixes are added to the noun or adjective to give negative meaning.

3.1 Negation by Prefixation

In Assamese, negation of some nouns and adjectives are done by prefixing negative prefix to the root. Those negative prefixes are- ɒ-, a-, ɒn-, ɒna-, ao-, bi-, be-, ni-, nir-, niː-, bina-, bɒd-, ku-, dur-, ɒpɒ- . The use of those negative prefixes are shown below-

Prefix	Root Word	Derived Form	Word Class
ɒ	*pɒrisitɒ* known	*ɒ-pɒrisitɒ* unknown	Adjective
a	*bɒtɒr* favourable weather	*ɒ-bɒtɒr* favourable weather	Noun
ɒn	*upɒstʰit*	*ɒn-upɒstʰit*	Noun

	present	absent	
ɒna	*ɒɦɒmija* Assamese	*ɒna-ɒɦɒmija* non-Assamese	Noun
ao	*bat* way	*ao-bat* wrong way	Noun
bi	*rag* attachment	*bi-rag* detachment	Adjective
be	*aini* legal	*be-aini* illegal	Adjective
ni	*laz* shame	*ni-laz* shameless	Adjective
nir	*aɦa* hope	*nir-aɦa* hopelessness	Noun
niː	*prɒjozɒn* need	*niː-prɒjozɒn* neddless	Noun
bina	*doɦ* fault	*bina-doɦ* without fault	Noun
bɒd	*nam* fame	*bɒd-nam* infamy	Noun
ku	*kɒrmɒ* deed	*ku-kɒrmɒ* misdeed	Noun
dur	*nam* repute	*dur-nam* disrepute	Noun
ɒpɒ	*jɒɦ* glory	*ɒpɒ-jɒɦ* contempt	Noun

Table No. 4: Illustration of negation by prefixation

From the above table it is seen that even after adding negative prefixes, all those words are not equally negative in sense. Some of them are total negative, while some others are partial negative in the sense that they indicate the absence of something. Therefore, from the view point of their meaning, negative prefixes can be divided into two broad divisions-

i) Total Negative Prefix: *ɒ-*, *ɒna-*, *ɒn-*, *ni-*, *nir-, niː-*, *bina-*
ii) Partial Negative Prefix: *be-, bi-, bɒd-, ao-, ɒpɒ-, ku-, dur-*

3.2 Negation by Suffixation

The negation of some Assamese noun words are done by suffixing *-hin, -bihin* and *-ɦunjɒ* to the root. For example-

Suffix	Root Word	Derived Form	Word Class
hin	*dʰɒn* wealth	*dʰɒnhin* wealthless	Noun
bihin	*ɒstrɒ*	*ɒstrɒ-bihin*	Noun

	weapon	weaponless	
ħunjɒ	*ɒbʰijog* complaint	*ɒbʰijog-ħunjɒ* complaintless	Noun

Table No. 5: Illustration of negation by suffixation

Here, it is worthy to mention that the word *'ħunjɒ'* can be used as a negative suffix only when it is prefixed to the root of a noun word, otherwise *'ħunjɒ'* is a free morpheme. Sometimes *'hara'*is also prefixed to some noun words to give negative meaning, e.g.-*pitri-hara* 'fatherless', *diħɒ-hara* 'directionless'

Similarly, *ɒbʰab* is also prefixed to some noun words to give negative meaning, e.g.-

kʰadjabʰab 'scarcity of food'

dʰɒnabʰab 'scarcity of money'

4. Negation in Assamese: An Overall Observation

From the above discussion it is seen that in Assamese, the morpheme *{nɒ}* is prefixed to the verb to give negative meaning. If the verb starts with vowel sound, the vowel sound of the negative morpheme is omitted. If the verb starts with consonant sound, the vowel sound of the negative morpheme *{nɒ}* is not omitted. In both cases, the negative morpheme {nɒ} takes its form depending upon the vowel sound with which the verb is used. The process of negation in Assamese by prefixing *{nɒ}* to the verb may be an instance of non-Aryan influence. It may be an instance of Tibeto-Burman influence on the language.

Among the modern Indo- Aryan languages, which are originated from the Magadhi, only in Assamese, negation is done by prefixing *{nɒ}* to the verb. In case of the Tibeto-Burman languages of Assam, negation is done in two ways- either the negative morpheme is prefixed to the verb or it is suffixed to the verb. In case of Bodo, the negative morpheme is usually suffixed to the verb, but in case of imperative sentences, it is prefixed to the verb. In case of Bodo, Deuri - Chutia languages, the morpheme- *{da}* is used to give negative meaning. For example-

da-kʰa 'do not go'
neg-go

da-da 'do not do'
neg-do

Like Assamese, in Tai-Ahom language also, the negative morpheme is assimilated with the verb to which it is prefixed.

ma : *kin* (eat) > *mikin* 'donot eat'
kju (fear) > *mukju* 'donot fear'

(Pathak 2008: 130)

In Linguistic Survey of India, Grierson points out that the unique system of Assamese negation may be influenced by the Tibeto-Burman, especially Bodo-Kachari language of Assam (LSI, Vol. III, Part- II, P-198). In present continuous, present perfect, past continuous, and past perfect forms of the Assamese regular verbs, usually the negation is done periphrastically. The negative form /as/ ‘be’ in present tense is */nae/*, which is person neutral. In case of the negation of the non-finite verbs, like that of the finite verbs, the allomorphs of morpheme {nɒ} are assimilated to the verb. In case of word level negation in Assamese, it is seen that the form indicating negation is either prefixed of suffixed to the root word. The negation formed in this way may be total or partial negative from the semantic point of view.

In conclusion, it can be said that as the Assamese negation process (basically negation of verb) is said to have influence of different Tibeto-Burman languages of the region, therefore any study on Assamese negation has to done by comparing it to the similar process of the Tibeto-Burman languages of the region, which m

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Ecolinguistics: the integrity and diversity of language systems

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A B S T R A C T

Under the wave of increasing reach of English language in the era of globalisation, the linguistic diversity of human society is in crisis and many languages are facing disappearance. This feature and the disappearance of ecological diversity are both imminent issues. This article attempts to analyse the crisis of linguistic diversity using the perspective of ecological linguistics and explore the relationship between linguistic diversity and ecological diversity. With the disappearance of the native language, the knowledge embedded in the language of some indigenous groups also disappeared, which is closely related to the ecological destruction of the area where they are located, and the cultural aggression encountered by the native society. This article initiates a discussion on the ecological and linguistic diversity, how human society should preserve the both in order to get benefited, furthermore, it analyses the present situation and the potential challenges in the course of preservation.

1. Introduction

The discussion about the relationship between ecology and language has been around for a long time. The idea of "integration between man and nature" in ancient cultures emphasised the harmony between nature and people in the universe, which can be regarded as a simple expression of ecological concepts. In the 19th century Europe, historical comparative linguists under the influence of evolution also generally regarded language as a life. The academic community generally regards Haugen's paper on ecology and language (Haugen 2001) as the source of ecological linguistics research. Haugen's view is basically metaphorical. He believes that the relationship between language and speech community can be compared with the relationship between language and environment. Haugen also believes that one of the goals of the research is to investigate, record and save the endangered languages on the planet and strive to maintain language diversity. The research contents of ecolinguistics studies include language status survey, language growth, language planning, language policy and so on (Huang Guowen, Zhao Ruihua 2017).

Ecological linguistics starts with a metaphor. In a speech in the 1970s, the Norwegian linguist Haugen talked about the interaction between language and environment, using a metaphor as the ecological relationship between a certain kind of flora and fauna in an environment and its environment. This metaphor laid the mainstream research paradigm of ecolinguistics. Different types of connections between language and ecology were established in the 1990s. Halliday (1992) emphasised the connection between language and growthism, and urged applied linguists not to ignore their research goals dealing with it. Ecological research on language includes studying how language reflects, refracts, and distorts our natural environment and social

environment. Using critical discourse analysis or system functional grammar to analyse how ecological crisis is in grammar and what constitutes and manifests in discourse, ecological linguistics has gradually developed into an institutionalised field. Today, ecological linguistics is still mainly used to study a wide range of linguistics subjects related to multilingualism, where aforementioned two basic analytical approaches are extremely important for the creation and development of ecological linguistics. Because they trigger two research methods of ecological linguistics, which are complementary to each other rather than mutually exclusive. From Haugen's point of view, when the language disappears increasingly faster, it is very important and urgent to study how to save endangered languages, maintain the integrity of the language system, and maintain the diversity of languages. Recently we can notice a few studies (Brenzinger, 2007) in these areas and field investigations, theoretical research, provide relevant literature, and save many endangered languages on the planet. The tasks worthy of linguists and researchers who are interested in ecological linguistics should be undertaken.

2. Literature Review

Ecology is not just a metaphor for language. In fact, human language communication and behaviour patterns are inherently related to the ecosystem. For example, people usually view economic development as progress, so various measures are needed to stimulate economic production and also consumption, but this growthism and consumerism are ecologically destructive. Therefore, it is also an important research direction of ecological linguistics to reflect on people's words and actions through discourse analysis to promote the balanced development of society and ecology, pointed out by Halliday (2011). Generally, the academic circles regard the two papers of Haugen and Halliday as landmark events in the development of ecological linguistics, which also lay the foundation for ecological linguistics research. Fill (2001) proposed that there are two models for the study of ecological linguistics, the Haugen model and the Halliday model, and his views are generally accepted by the academic community. In addition, according to the supplement of LeVesseur (2015), the research model of eco-linguistics should also include "biological-linguistic diversity" research represented by Nettle and Romaine (2000). This article uses this as an entry point to tentatively discuss the interactive relationship between language diversity and ecological diversity.

2.1. Language diversity crisis

There is no clear conclusion yet about the time when human language originated, but the earliest Homo sapiens, or people of the Neolithic age, certainly have the ability to communicate in language (Xingwei Miao & Yun Zhao 2018). From cooperative hunting, establishment of sacrificial places, to settlement, the rise of agriculture and animal husbandry, these social behaviours can only be achieved with the help of language. Homo sapiens has also brought language to all parts of the world during its long migration, and various rich languages have also formed during this process. On the topic of total number of languages, according to different estimation methods, the conclusions are also different. The statistics of the number of languages is not an easy thing to reach a consensus on. Because the definition of language is already loose, and there is a vague boundary between dialect and language, the definition of language is also affected by political and cultural factors. It is said that there were about 20,000 languages in the world before the agricultural era. In addition, according to Chafe's survey, the academic community estimated that there are 400-2500 differences in the total number of American Indian

languages (Zhou Liuxi, 2019). However, it is of little significance to argue whether the number of languages is 6000 or 20,000. The widely accepted view is to measure the number of languages used by people as mother tongues in a particular area. In short, there is only one species of human beings, but there are thousands of languages used for communication. This feature is called linguistic diversity.

2.2. The importance of language diversity

Maintaining language diversity is extremely meaningful. The relationship between language and human development is very close. First of all, the importance of language in storing knowledge is self-evident. Without the transmission of language, the knowledge accumulated by humans cannot be passed on from generation to generation, and human society cannot progress at all. Secondly, human communication and cooperation are completely dependent on language, which is the basic condition to differentiate human beings from other great apes. Finally, human cultural development, language behaviour and cultural transmission also depend on language. Before the rise of capital economy and globalisation, the basic mode of human existence was based on the setting of local language and culture. Maintaining the diversity of human language is not only for the language itself, but more importantly for the development of human society.

Diversified languages and cultures are a treasure trove of knowledge for historical development. Any weakening of linguistic diversity will reduce the adaptability of species, because it reduces the knowledge source we rely on. Global linguistic diversity constitutes a rational circle of life surrounding the earth like the biosphere, it is the basis of human existence. Perceptual knowledge of language diversity is the basic condition of human consciousness. From this point of view, it is necessary to seek a moral rule to protect diversity and strive to achieve diversity's integrity rather than unity. The global diversity data and the catalogue of world languages show a clear correlation between language diversity and biodiversity on a global scale. According to statistics, Harmon (2002) found that 10 of the top 12 countries with high biodiversity have the highest linguistic diversity in the world. These correlations indicate that linguistic diversity in these countries is extremely vulnerable to the effects of opposing political, economic, and social processes. Harmon also studied the biogeographical factors that can explain these correlations, because by comparison they can influence the development of language and biodiversity.

According to the introduction of Phillipson, Robert & Skutnabb-Kangas, Tove (2018), to determine language diversity, it can be based on the number of languages or the distribution of languages. The most common one is the "diversity index", which randomly measures the probability of two people in a country or region choosing different languages. The highest probability value is 1, meaning complete diversity, that is, no one has the same mother tongue and there are 100 people. There are 100 different languages; the lowest probability value is 0, and there is no diversity in meaning, that is, everyone has the same mother tongue. The above are two extreme cases, whereas, the general language diversity index is between 0-1. For example, Papua New Guinea has 838 languages and the diversity index is 0.988, which is the highest in the world. However, human's linguistic diversity is facing a huge crisis, that is, Whaley (2003) said "the transformation of linguistic and cultural diversity into linguistic and cultural unity". Similarly, in a 2017 TED speech, Lera Boroditsy said that "One language disappears about every week, and it is estimated that half of the existing languages will disappear in the next few

hundred years". This shows that we are already facing severe language diversity crisis. In addition to the disappearance of language types, language distribution is also extremely uneven. According to the statistics of the 17th edition of Ethnologue[i], about 10% of the countries in the world have about 85.4% of the language. The top ten languages with the largest number of native speakers in the world include Chinese, Spanish, English, Hindi, Arabic, etc. (Gorenflo 2012). These native speakers account for more than half of the world. Approximately 88% of languages have less than one million native speakers, while approximately 21.6% of native speakers have fewer than 1,000 speakers. It can be seen that the speed of language disappearing is increasing day by day, and the characteristic of language diversity is actually disappearing.

3. Research Methods

Although eco-linguistic research is complicated, it is not without rules. It has its specific research principles. The general principle of ecological linguistics research is to determine and protect the diversity of global languages. The basic principle is to determine the interaction between language and environment, and to explore the integrity of language, the formula is: diversity + interaction = integrity (Fill, 1998).

With regard to human language and the environment in which language is used, ecological linguistics has applied many viewpoints and assumptions. According to the latest development trend, the study of language forms is carried out in related research in other generally recognised fields similar to human life. The study of ecolinguistics is based on the so-called internal relations, mutual relations and external relations to think about the language in the form of oral and written format. Although structuralists have been devoted to the study of the internal relations of language, their contribution cannot be denied or underestimated, but when it comes to system units and rules that maintain the system to ignore any specific content, as long as communication occurs under certain conditions or specific environment, they completely ignore the two levels of mutual relations and external relations. Ecological linguists believe that language is not an autonomous prerogative but is connected to many aspects of human life. Therefore, the main purpose of the research is not the system itself, but the influence of the viewpoint of interrelated language structures, to study the language unit and its relationship with the environment, expressing the external relations of the language in a dynamic and comprehensive way. This paper will also make use of the same methodology adopted by the majority of the studies on ecolinguistics.

4. Data Analysis

One of the important features of the language ecosystem is its integrity (Mühlhäusler 1995). The language is composed of many ecological environmental factors, including the relationship between language and language or dialects, language and language user, scope of use, attitudes, policies, characters, and internal language. The sum of existing or potentially complementary relationships between all large and small languages in the world constitutes the ecological environment of human language. The balance of this environment is based on the natural existence, equal contact and interaction of all languages. The integrity or fragmentation of the language ecosystem has always been an important research topic in the field of ecological

[i] https://www.ethnologue.com

linguistics. The issues discussed involve the extent to which the ecological and non-ecological factors contained in the language system are affected, for example, to what extent do these language arguments influence people's thinking and behaviour. How to use language to shape a biologically centric worldview instead of highlighting a human-centred worldview and a mechanical worldview. Ecolinguistics promotes the integrity of the language ecosystem, which is the key theory of ecological linguistics research methods. The holistic approach to eco-linguistics research means that language cannot be studied as an isolated system, but needs to be studied in its natural environment, for instance, from the perspective of individual development and phylogeny, the production and evolution of language are jointly determined. The holistic language brings a lot of methodological thinking. First, the holistic approach prompts ecological linguists to explore the characteristics of the relationship between language and communication. The relationship in ecological linguistics refers to individual-situation and social and cultural phenomena. Therefore, ecological linguistic analysis links linguistic data with the disposition of the speaker's situation and the complexities of the socio-cultural and socio-economic characteristics of the speech community. Secondly, since the holistic approach presupposes a worldview in which everything is an integral part of the whole, ecolinguists describe language phenomena as interconnected, interdependent, and interacting. There is no one-way, only two-way, but it does not refer to be symmetric, one part may dominate the other. Thirdly, holism also emphasises the diversity of languages. Ecological linguists did not seek universality in any form but adopted a descriptive framework to emphasise individuality and specificity, rather than totality and generality. This distinguishes ecological linguistics from the fields of sociolinguistics and conversational analysis. Fourth, the holistic approach introduces many ecolinguists to system theory, including its latest development of complex theory, the concept of open systems, dynamics, and ground-breaking theory. These theoretical frameworks provide arguments about language as a medium between culture and natural ecosystems. Fifth, the holistic starting point led eco-linguists to adopt the dialogue perspective, that is, the fusion of individuals, situations, and cultures arises from dialogues; the interconnectedness, interdependence, and interaction of languages develops in dialogues; dialogues are social culture and language. The creation and maintenance of diversity provides nourishing land; dialogue provides the possibility to realise our potential to change ourselves and the environment. Language explains the world and the world also explains language. There is a continuous cycle of influence between the two, which can be said to be an ecological interaction (Kramsch, 2008).

Ecolinguistics is regarded as a network of human relations, containing not only language and social environment but also the natural environment and the interrelated parts as a whole. This point of view is partly derived from linguistic research on linguistic ecology. The exploration of these issues will help to increase the recognition of ecological knowledge and practical value of local and other local people's recognition of the degree of meaning through language development, coding and transmission. The focus on the relationship between language and the environment began with research on indigenous knowledge, ethnobiologists and ethnoecologists over the past few decades and with research on the use of local plants, animals, ecosystems, and attention to the local explorations made by researchers who named the place. Many languages in the world, especially those with a relatively small range of local languages and minority community languages, are at risk of being replaced by "large" or "main" languages for various reasons, both within the country and internationally, threatening the maintenance of the integrity of the language system. Concerns about the relationship between language, culture, and

biodiversity, their overlapping distribution across the globe, and the common threats they faced began with thought-provoking remarks in the mid-1990s that "the current lack of biodiversity and the 'extinctional crisis' that affects language and cultural diversity is closely related" (Maffi, 2001).

4.1. The relationship between language diversity and ecological diversity

Krauss's work (1992) provoke us to think about that the world's most biologically inherited places are also the places with the most linguistic diversity. Is this co-occurrence relationship just a coincidence, or is there an inherent connection? We try to look at the interactive relationship between the two from the perspective of ecological linguistics.

4.1.1. Co-occurrence relationship between the two

Ecological diversity is a broad concept, generally used to refer to the diversity of life forms. Language is a form of human life. Humans can be said to live in language. Our language behaviour, rituals, and communication are all done through language, so the richness of language is inevitably related to the richness of life forms. Therefore, part of the study of language diversity belongs to the field of ecological linguistics, because the adaptability of culture to the environment is embedded in the native language, and the diversity of the native language is also related to the biodiversity of the region.

According to the statistics of the 17th edition of Ethnologue, eight of the top ten countries in the language diversity index are in Africa. According to geneticist Tishkoff, Africans have more genetic diversity than people in other regions, which may be related to human origin. In relation to Africa, part of our ancient ancestors left Africa, and humans have reproduced in other parts of the world. Therefore, the genetic diversity in other parts of the world is inferior to Africa. Africa, which accounts for one-seventh of the world's population, has more than 2000 languages, accounting for about one-third of the total number of languages in the world (Felter, 2015). In addition, Goatly (1996) also found that as biodiversity is lost, language and cultural diversity are also lost. They studied the co-occurrence relationship between language and cultural diversity and found that regions with high biodiversity also have higher language diversity. Scientists speculate that local culture and language have a positive effect on the maintenance of ecosystems. There are similar views in Nettle and Romaine (2000: 166). They believe that for the indigenous people, hundreds of generations are living in unique contexts, and many specific knowledge about the local ecology is also embedded in the local language, so they have relevant unique ecological knowledge, and these languages and the knowledge embedded in them are facing the challenge to become extinct.

4.2. The causes of the language diversity crisis

Nettle and Romaine (2000) coined the term "biological-linguistic diversity" to describe the connection between the demise of language and the reduction of biodiversity, and hope that everyone will value the interaction and impact between humans and culture. They mentioned that from the agricultural revolution to the industrial revolution to globalisation, these three forces contributed to the disappearance of linguistic and cultural diversity, and at the same time led to the disappearance of biodiversity. In fact, the disappearance of language diversity is closely

related to the current development trend of globalisation, which is mainly manifested in the interrelated parts of economic development, technological progress, and cultural propagation. Economic development is the focus of almost all countries today, and in order to achieve large-scale economic development and the cooperation of all countries in the world, the trend of globalisation is inevitable. In this situation, it will naturally form a general view that we need a universal and stable language. For historical reasons, especially after the massive colonisation of the United Kingdom and the rapid rise of the United States, the common language in the world today is English. In addition, due to the large number of native speakers, Chinese and Spanish are also mainstream languages.

The impact of mainstream culture on non-mainstream culture is also one of the reasons for the crisis of language and cultural diversity. Taking Indonesia as an example, Indonesia's language diversity index is 0.815, which also belongs to a relatively high country. However, scholars' attention to Indonesian language issues has taught us that Indonesia is also experiencing a crisis of language diversity. First of all, the spread of culture led to the disappearance of some native words, such as the word '*smong*', which means "huge waves, tsunami". Later, the word disappeared and was replaced by tsunami. In addition, according to Alwin's (1998) research, the term *kelambi* means textiles, which comes from the Tamil language and was often used by Balinese people in the 1960s, because at that time Tamil people often did textile business with local people. Since the 1970s, Tamil-style textiles are gradually considered outdated, the use of the term *kelambi* has been reduced, and people have begun to use the term *baju* to refer to new fabrics (Alwin 1998; Alwin 2001). In addition, Rasna and Binawati surveyed 225 local Balinese youths on the knowledge of traditional herbs and found that about 90% of them were totally unaware of the traditional 56 kinds of medicines for treating children's diseases. Consequently, these vocabularies referring to drugs disappeared (Ibid.).

From an ecological point of view, different linguistic backgrounds and cultures contain important ecological resources, and the definition of common language is functional, that is, to achieve a certain communicative function under specific historical conditions. The life form represented by a single language and culture is destined to be poor, and human life and the natural world should be multi-dimensional.

4.3. Differences between biodiversity and linguistic diversity

Although there is a certain relationship between biodiversity and linguistic diversity, for example, many ecologically rich areas have rich language forms, the opposite is not so prominent. The main reason is that the evolution of biology and the development of language are two different processes. Biological evolution takes a long time, and the entire history of human language is only a drop in the ocean compared to the history of the earth's ecosystem. In addition, the extinction of species is usually irreversible, and the extinct animals cannot be reproduced under the existing technology. Different from this, the demise of language is usually defined as the death of the last person who uses the language, but language data can be saved, phonetic and grammatical features can be recorded, and the dying language can also be resurrected, such as the revival of Hebrew language. Languages without native speakers can also exist for special purposes, such as Latin, Sanskrit or the fictional Klingon and Valesian languages.

Skutnabb-Kangas, Tove & Harmon, David (2018) pointed out, the demise of linguistic diversity involves the wishes of human beings. Comparing langue to the species they mentioned that the language is a conscious choice by users but living things cannot choose to be species. In addition, humans can become multilingual, and species can only be unique. Finally, the boundaries between species are clearly defined. There is a scientific definition and standard for distinguishing the biological specie, however, there is no such boundary between languages. They also believe that, from the perspective of social culture, language is a more complex existence than species and has a wider range of influence.

Broadly, linguistic diversity is defined as the "varieties category of human language appearance". The more languages are there, the higher is the language diversity. Studies have shown that there are 6912 existing languages in the world, but they include dialects or variants. In fact, languages are not isolated individuals. In many cases, there is no clear boundary between them, but a continuous extension along a geographical area. The distribution of these languages on different continents shows an important difference. Africa and Asia have far more languages than Europe. The languages included here are living languages, meaning, there are language users. Nigeria has more than 400 languages, and its linguistic diversity is higher than that of the whole of Europe, but the linguistic diversity disappears quickly. According to estimates by linguists, the loss of linguistic diversity due to the destruction of language integrity by 2100 has severely threatened the survival of 50% - 90% of the currently used 6000+ languages. According to conservative estimates, 20% of the biological species we have now will disappear by 2100, which means that 100 years later, 20% of the biological species but 90% of the language will die.

The ecological linguistic proposition to maintain linguistic diversity is linked to biodiversity. Muhlhausler (1995) believes that language diversity reflects the adaptation of humans to complex environmental conditions for thousands of years; biodiversity is considered in different degrees by different languages. Discourse about the environment actually has an impact on these, especially when the lack of language resources causes the environment to deteriorate. The reduction and disappearance of "small" language is not an independent phenomenon but embedded in a larger range related to ecological factors. In Muhlhausler's research, attention to the environment is linked to the loss of linguistic diversity and the demise of "small" languages. His "linguistic ecology" uses the metaphorical meaning and literal meaning of ecology and environment, which can be said to be the most comprehensive research method in ecological linguistics (Muhlhausler, 1995). Crystal (2000) emphasises two propositions of biodiversity to explore the application of linguistic diversity: the entire concept of the ecosystem is based on relational networks, and the destruction of any factor in the ecosystem will have unpredictable consequences on the entire system; diversity helps evolution, the most powerful ecosystems are those with diverse systems. The demise of any language is a huge loss, because its demise implies the disappearance of inherited knowledge. Culture is transmitted through language, and language also reflects the human history of using language. Language diversity is no less important than ecological diversity, as Krauss (1992) said: "Just as the extinction of any animal species will reduce the value of the world, so is the extinction of language, because language is the crystallisation and highest achievement of human collective wisdom. Language, cultural diversity and biodiversity are interrelated. In areas with high language and cultural diversity, biodiversity is also high, and vice versa" (Krauss, 1992).

5. Discussion on potential reasons of language extinction

The reason for language extinction is, of course, the disappearance of native speakers. In today's world, it is mainly manifested in the disappearance of minority languages and the reduction of the indigenous population. There are both passive and active factors. The mother tongue groups of endangered languages are generally the culturally disadvantaged groups. Because of the relationship between political and economic interests, many people's living spaces have been eroded, such as the establishment of factories, mining and logging, which not only destroyed the ecological environment, but also affected the lifestyle of the indigenous people. They were forced to enter the city and adapt to the city language and culture shock. In the mainstream discourses of society, the image of indigenous groups is also often solidified. Media texts often shape mainstream languages into stronger civilisations and better lifestyles. Indigenous groups and ethnic minorities and their crisis of language symbolise the ignorance and backwardness. In this context, non-mainstream language groups are more willing to change their original lifestyle and language form and are more willing to accept the influence of strong culture from their

descendants. In this case, the important question is, how to preserve the language and culture in crisis as much as possible from the wave of globalisation. From an ecological point of view, rather, how to effectively protect the ecological crisis. At the same time, how to raise people's awareness of ecological protection, and to arouse people's attention to the language crisis, is also an issue that needs urgent attention. The reality that people have understood and constructed before is based on anthropocentric philosophy. The past development and progress of mankind are based on the basic way of thinking and behaviour that regards ecology as a resource and nature as a tool. However, as part of the ecology, human well-being is not only related to economic development (Rong Wei & Wei He 2017).

6. Challenges

The study of ecological linguistics also encountered a series of difficulties. In theory, studying the language system with ecological methods will face four challenges. From a historical perspective, individuals who learn a second language from childhood to adulthood have been socialised in a certain language and culture at home, school or workplace, when they try to adopt the verbal and non-verbal behaviours of another verbal society, the socialised memories of the past still remain. From a cognitive perspective, according to the principle of language relevance, we need to consider the language classification as a text and construct the language in the way in which we feel reality. Although non-native speakers have been socialised and adopted the language and pragmatic coding of the second language community, they still likely to retain the meaning of their native languages to construct textual categories and mental models. From a methodological perspective, there is very little literature on the historical and cognitive relevance brought by exploring several languages and across several speech communities, because this is often a subjective evaluation, which varies according to the specific circumstances of the individual ecology at the time. Researchers studying the ecological architecture feel the need to collect qualitative data or longitudinal data to get the research on track. Ecological research methods can provide more internal ecological effectiveness, but less reliability, less generality or external effectiveness. From an ethical point of view, applying the paradigm of socialisation of the native language to individuals who have not been exposed before will raise ethical issues. In

particular, it is easy for non-native speakers to socialise in a practical real life situation, which can be found in big cities where linguistic landscape is broad.

7. Conclusion

Language and cultural diversity are related to biodiversity. In areas with the language and cultural diversity, biodiversity is also high, and vice versa. It is noticed that the closer to the equatorial region, the greater is the number of languages. The length of the rainy season is directly related to the number of languages. Biodiversity and linguistic diversity are manifestations of the diversity of life systems and the result of self-regulation of the earth's ecosystem. The rich and diverse knowledge of human beings can only be fully reflected by relying on a variety of languages; reducing the diversity of languages will reduce the knowledge base available to humans, thereby weakening the human ability to adapt to the natural environment (Fan Jun, 2003). Language diversity and biodiversity promote and support each other. Diversity reflects the potential for adaptation. Consistency harms species because of the inelasticity and non-adaptability it brings. Our success on this planet is due to our ability to adapt to different environments and cultures for thousands of years. This ability comes from diversity. Therefore, linguistic and cultural diversity maximises the opportunities for human success and adaptation. Just as the criterion of biology is diversity, the criterion of language systems is also diversity, that is, multilingualism. From a complementary perspective, the deep connection between language and ecology and the consequences of the lack of language and biodiversity are obvious, especially the role of metaphors in human communication and biological-based metaphors support us in terms of understanding. As both linguistic diversity and biodiversity have been eroded, these basic metaphors are also gradually losing their role as thinking and identity with other identities.

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Effective use of Language for Teaching Learning

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A B S T R A C T

Language is identified as a tool for communication. Through language a person learns about culture, tradition and society. Therefore, learning language is important aspect of a person's life. More than learning language, using it to achieve goals in life is more important. A person, who knows language but cannot use it effectively and efficiently for practical use, is like a person who cannot make use of own senses. Once person starts using language, s/he can easily adjust and live in the context. Therefore, in learning of language not only knowledge but skills need to be given importance. It is not knowledge of skills but use of skills in day to day life is more important to achieve the objectives of language learning. In a nutshell a person makes use of language learnt through use of skills. So, in formal learning settings both aspects need to be given importance. In a normal learning situation, student coming to class already learns the language through listening and speaking and enhance it further through reading and writing. But today's globalized world makes things complex because of influx of people from different contexts. Heterogeneity is the normal feature of classrooms of today. So the normal idea of mother tongue is the medium of instruction, is not applicable to all. What is happening in this situation in classrooms? How to develop proper use of skills for all students? Is the approach of Language across Curriculum, newly proposed by NCTE framework of any use in this situation? These are the questions tried to be answered through discussion in this present paper.

Introduction

Language is everything for a person. Without language one cannot survive. It is the communication tool with which person lives in the world with success and satisfaction. We can communicate our ideas, emotions, desires, needs and many more to live in this world with peace and harmony, once language of the living context is known. The first touch of language is definitely through parents. Then teachers in school channelize it to appropriate level. This provides the capacity to use language in society to survive. People across nations use different languages to communicate. There exist thousands of languages with many dialects in the world. The primary understanding about language learning is all languages have a basic structure inbuilt, into which persons fits in the language of his/her living context. Vygotsky proposed this existence of Language Acquisition Device in a person. This enables the person to understand language/s even not knowing to some extent. We can at least understand the context of conversation when we hear to an unknown language. Therefore, context and language (verbal

and nonverbal) are important in acquiring language. Both these aspects need to be given importance in formal teaching learning of a language for later effective use.

Process of Learning a Language

Generally the process of learning a language starts with birth. Infant first comes into contact with world through mother, then family. Later on relatives, friends and further expansion takes place in learning language. It starts with symbols and gradually extends into words, sentences and full level communication. The child learns language through listening and speaking. These are the primary or basic skills in getting exposure to language. Later in school the process is fine tuned through exposing the child to reading and writing. This is how a child learns mother tongue from birth to adult life. The mastery in mother tongue helps the child to understand other languages which he / she come across in life situations, i.e. in school or employment. With the help of mother tongue comprehension a person tries to learn second, third and so many languages that are required for sustaining life.

Process of language learning in classrooms

A child is exposed to different contents in school and classrooms in particular. Curriculum and syllabus fixed for a particular standard enables this process. With age the difficulty level gradually increases to develop capacities and abilities in students in learning and improving knowledge and skills. The curriculum and syllabi are developed according to the contextual needs. In general a child gets exposure to one or more languages and fixed number of subjects. In school contexts, these subjects are three languages according to three language formula adopted by government and three content areas, science, social science and mathematics. Across the globe the languages may differ, but content areas remain more or less same, i.e., mathematics, science and social science. For convenience of discussion, we identify them as language subjects and content subjects.

In order to start with learning, initial emphasis is on one language that is mother tongue and three content areas. First environmental science is taught along with mathematics. Later on in primary classes, environmental science is differentiated into science and social science. From upper primary level the subjects remain as three languages and three content areas as mentioned above. The idea of learning here is that the child learns languages through language subjects and uses it effectively to learn and express ideas on three content areas. Language learning is to develop mastery over content areas.

But the general idea of learning language is different in learning contexts. This is visible even today from schools to higher education. Language is important in language subjects and content meaning is important in content subjects. This is the general impression of different subjects taught in schools even today. This is clearly visible the way teacher assesses the performance of students. In language assessment only language aspects are given importance and in content areas meaning is given more importance than language. Because of this society gives different priorities to languages and content subjects. This is clearly visible in education and employment preferences world over.

The changing idea now in learning context is every subject is a language. This is not a new idea for language masters. We often hear the word ‘registers’ in language learning contexts. Every

profession has its own language markers, i.e., specific words used to make things explicit. People learn these registers during their professional training and starts using them. Gradually this becomes their identity. We generally identify and guess the profession of a person the moment they start interacting with us. In the same sense, the new ideas now propagate that every subject in school is a language and needs to be taught with emphasis on language. This is opposite to the earlier idea where language is given importance in language subjects only. According to the new idea, teacher has to focus specifically on developing the language of the subject being taught. There needs to be a focus on vocabulary and sentence formation using subject specific vocabulary in conveying correct meaning. Therefore teacher has to critically analyze and examine the language used by student while expressing ideas and writing answers during assessment practices. This develops the language capacity of the students and they will be able to express clearly their ideas through content to win the situations. In a way we are making our students multilingual.

Multilingualism in Teaching Learning Aspect

Multilingualism in a general sense is the capacity to use more than one language with the same fluency as that of mother tongue. A child learns to use the language with same fluency as that of mother tongue for his / her daily life situations. But when we examine the last paragraph of above discussion, the child is becoming multilingual basing on the number of subjects being taught in a formal setting also. In this sense there are two types of multilingual situations the child is exposed to.

- **Internal Multilingualism** - Initially child learns mother tongue along with other subjects and learns to express ideas on content areas using mother tongue. This is first level of multilingualism, known as, *internal multilingualism*. Here the child learns the language from birth and expands it through school and uses it in expression of content areas. First language and content areas are the different languages learnt by the child in this area.
- **External Multilingualism** – as child matures, in formal settings gets exposure to second and third languages. From primary level second language is introduced and from upper primary level third language is introduced. Now child learns the new language/s in a formal setting and starts using them. When child acquires the capacity to use the second and third language to express the ideas about content areas as fluently as using the mother tongue, the second level of multilingualism occurs. This is *external multilingualism*. Here child expanded the capacity to conquer more than one language situations to earn livelihood and living.

For present day situations, the implication of above discussion is we need to develop our students from internal multilingualism to external multilingualism. This provides the best of opportunities for them to gain success. A clarity on the nature of language in different subjects is very important for students to gain through multilingualism.

Nature of Language as subject and content

Here we are not talking language nature in general. We try to understand what is language as a subject and language as content. Language as a subject includes knowledge about language in detail. We focus on literature, grammar, skills etc. etc. Language as a subject is vast, touching upon all areas of universe, verbose, decorative, elaborate and unending. It is more emotive in nature. It also conveys meaning in different angles. One can write pages about the meaning. Language as a content is different. It is limited in vocabulary, terse, compact, and descriptive. Content language is to the point, not elaborate things but describe to the limited extent possible. It is straight in giving out meaning and understanding. The words give out only one and one meaning. But language as a subject is loaded with several indirect descriptions. In Economics content in order to describe inflation rate one says '*inflation rate is high at 8.5%*'. The same can be described using language as 'inflation rate is elephantine at 8.5%'. In order to make people feel the hugeness of inflation the word '*elephantine*' is used. But economics as a content is more concerned with the effects of inflation on economy. Therefore, one single word 'high' is used in a simple way. It conveys only one meaning to readers. But word elephantine can be interpreted in many ways. These nuances of subject language and content language need to be known to students while expressing ideas.

Normal Learning Process in schools to develop multilingualism

The learning process in schools is also arranged in a systematic pattern to develop the above explained multilingualism. Generally mother tongue is the medium of instruction in schools. When child comes to school, s/he knows language through listening and speaking. School extends language learning by developing reading and writing skills along with enhancement of listening and speaking skills. Along with mother tongue learning of science and mathematics start. Students learn expression of mother tongue through learning of all subjects.

In developing language first emphasis is on listening and speaking. This is already started from family. Schools take this to higher level and then start gradually with reading and writing. The process of giving much focus on reading and writing increased once child reaches fourth standard. According to psychological research findings, at the age of 8, a child is physically and mentally fit to take up long reading and writing assignments. Before 7 years of age child can grasp things through listening and speaking. Therefore, schools focus on oral activities more in earlier stages of learning and gradually improve the written activities in later stages. In this way the internal multilingualism is achieved by school in early stages of schooling as mother tongue is the medium of instruction.

Second language is offered from 4^{th} standard by schools, as child acquires mastery over first language / mother tongue by this time. S/he can transfer the mastery in learning the second language easily. Here, the learning strategies are also changed according to the child developmental aspects. Finally third language is introduced during upper primary stage, to complete circle of learning. This is the process of learning with central board of education in India, which is based on the physical and psychological development of children. Gradual introduction of second and third languages develop external multilingualism which helps the children to survive in outside world once they complete higher secondary.

Even when mother tongue is not the medium of instruction, the school follows a process of speaking the language of medium of instruction strictly from the first day of schooling. All through communication happens following the language of medium of instruction. This enables the child to pick up the language through listening and speaking because of high mental faculty to speak the language at younger stage. Later on the language capacity is fine-tuned with reading and writing development. Here one important aspect is to continue language learning sustenance through parental support after school. Therefore, schools emphasize on parental learning of language while giving admission to students. English medium schools emphasize on taking parent's interview before giving admission because of this reason.

Present day Complexity in Learning of Language

This is the normal expected way of learning language/s by human child in formal settings. It is rare to see such kind of strict settings in the context due to cut through competition for existence. Because of cut through competition private and even public schools are not strictly following the above mentioned process. Most of the schools introduce languages at the early standards i.e. 1st standard onwards. The level of vocabulary for the children to mug up is also above their experience level. Parental pressure is one of reason for this.

1. **Increasing heterogeneity** – today's classrooms are no more homogeneous with reference to language. We find students from a multiple settings of existence due to migration of parents from their natives in search of livelihood.
2. **Mother tongue is not the medium of instruction** – Most of the schools are following English as the medium of instruction. Day by day schools with vernacular medium of instruction are reducing. Because of dominance of English as an established international language, public schools that are following vernacular medium of instruction are also providing more support to learning of English along with other languages. In the teaching learning special emphasis and focus is being given to English in recent times.
3. **Parental expectations** – because of globalization and internationalization of education, parents also understood the importance of English. Because of colonial past, mastery of English is an inherent part of learning for Indian parents from the beginning. Even parents who cannot afford the language education, tries to get admission for their ward in private English medium schools. They know English is the gateway of opportunities for their children. Increasing technology use in employment like outsourcing also giving emphasis to this aspiration for children to master English for better prospects in future.
4. **Parents lack knowledge of school language** – whether it is English or regional language, the migrating parents lack the mastery of language as explained in the above paragraphs. Because of this it is not possible for the child to achieve internal multilingualism to the full extent in school settings. Child may not be up to the mark in the mastery of school language, which is not the mother tongue of the child.
5. **Medium of instruction is second language** – if mother tongue is medium of instruction the achievement of internal multilingualism is easy. But in cases, where medium of instruction is either English or regional language, which is definitely not the mother tongue of the student, there are gaps in achieving internal multilingualism to the required level. Parents and teachers have to strive hard in making this goal possible. Mostly this aspect is dependent on the extent of understanding of the parents about language learning

needs of the students. Parental support plays an important support for students to master the second language i.e. school language.

6. **Changing learning situations**– because of the above explained situations, students are not able to pick up the language according to expectations. Because of emphasis on mastering school language (English or regional language), parents neglect the learning of the mother tongue. They have to; otherwise it creates confusion for child to master two languages simultaneously. Once they master school language, then second and third language learning is possible. In this process mother tongue is neglected. Parents have to discontinue the speaking of mother tongue in order to make child proficient in school language. For students with poor language acquisition environments the situation is worse, as there is no support for them to enhance school language after school. It makes them poor masters of both, school language and mother tongue. So there appear conditions like following.
   - Students master school language, mother tongue and regional language with support systems.
   - Students master the school language and mother tongue because of support, but may lack mastery of regional language.
   - Students master the school language and become poor acquirers of regional language and mother tongue because of parental lack of awareness.
   - Students become poor acquirers of school language, mother tongue and regional language without support system.
7. **Absence of language** – the changing learning situations are leading to a situation of absence of language. The children learn languages to clear exams, but they are masters of none. They pass on the same situation to their future generations. In this sense, we are losing our own language in the aspiration or necessity to survive in a different context. Because of lack of support from family to learn regional language or school language, we are not masters in those languages also. This is absence of language. As child is not master in any one language, they may lack clarity in expression. With absence of language tradition, culture, life style everything is lost. Because of lack of communication in mother tongue future generations are not aware of their own culture and tradition, as their parents could not master the mother tongue. They may speak and interact, but not the owners of the language anymore. They may even lose the language also in subsequent times.

Working parents, nuclear families, lack of supporting systems from elders etc. also posing problems for children to master language. In a situation, where parents speak one language, caring nannies speak regional language and school speaking school language, children find it difficult to grasp and master language/s. Report of children not able to utter a word even after reaching the age of two are witnessed by the writer. They could not talk because they are exposed to so many languages at the same time. They are confused to grasp which language and so not able to speak. Children need exposure to their mother tongue first then other languages. They can pick up language faster at that tender age so can learn languages faster. Otherwise they lost their mother tongue, which is the soul of their existence. In this sense, they lost their existence in future. They belong nowhere.

How to improve upon

It is not improving upon but surviving with vigilance and awareness. With rapid changes, technology empowerment, and global environment education and employment scenarios have undergone revolutionary changes. We cannot go back to the previous society and start afresh. We have to adjust to the present with vigilance and make our children learn things and survive. They should know how to preserve their own culture and at the same time learn the necessary skills to survive in global society. It needs to be the combined effort of all. But the process starts with parents.

1. **Parental Awareness -** Parents first needs to be vigilant and aware about the learning situations and plan for the development of language/s. They need to develop good idea about developmental aspects of children and the way to expose them to their mother tongue and then gradually to other languages. One parent must be free otherwise take out proper time to engage with children and their language learning.
2. **Teacher Support –** More than school support, teacher's support is more important. It is teacher who has the knowledge of child development and got training to channelize the learning process of students. Teacher can develop this awareness in parents and comfort them to channelize their ward's development in a proper manner. If teacher is properly trained to handle children in this learning aspect, parents can take it further. Mutual respect is most important here.
3. **Non Formal Systems –** Today's world is technology prone. Online learning is available for children with different learning platforms like MOODLE, MOOCs etc. Government is also developing many projects to make this online learning possible. Outside school also there are many opportunities to learn the language/s. For mother tongue development family is the main source. Parents have to use these opportunities properly.
4. **Adopting the approach of language across curriculum -** with NCTE 2014 regulations B. Ed. programme is reoriented with more practical outlook into a two year programme. Many practical based aspects are introduced into the programmed with an emphasis to improve the student teachers' engagement with the field. One of the new content is '*Language across Curriculum*', which is talking about the effective use of language across all subjects of the curriculum. If this approach is adopted successfully into school learning, we can achieve the internal and external multilingualism successfully. For primary understanding the approach is explained below.
   Language across curriculum is an approach that focuses on both language learning and content learning. It identifies each subject as a language and emphasizes on developing mastery of each subject language. It is integration of language learning and content learning. It aims at improving language proficiency in all subjects so that students' learning is improved and learning outcomes are achieved. Language learning occurs in each and every subject of the curriculum, not only in specific language. So the name is language across curriculum. Every subject has its specific vocabulary and way of expression. Students have to understand this difference and channelize their expression accordingly. This is the responsibility of all subject teachers to develop language proficiency. It focuses on learning language and using that language with mastery in all subjects. The specificity comes for each language with the nature and use of subject in the society. When language mastery is clear, students can assimilate content with more clarity. They can also express with more comprehension in exams. So if language

learning is weak, their content learning is going to be weak. They do not know the correct expression of the language in content in order to give out their own idea on question or discussion. So teachers have to develop this expression in order to win. Our emphasis is on practicing types of answers to write in exams, but it is to be changed to tackle the question with comprehension on the spot to answer.

Conclusion

Situations of learning are evolving so rapidly for children in today's globalized world. No doubt one has to survive in the present context, embracing good practices of past and adopting new requirements quickly. The present lock down due to virus infection is a clear example of the situation. We cannot win the virus with lockdown but by attacking it with immunity. But how to develop immunity is the learning. In the same way, we cannot avoid English and other languages which are necessary for survival, but how to preserve our culture by learning mother tongue and all required languages is the question to be pondered by all stakeholders.

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Effect of Vowels and Consonants in Psycholinguistic differentiation of South Indian Dravidian words using relative priming and hierarchical clustering

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A B S T R A C T

North and South Indian population can be differentiated genetically and linguistically from each other. Linguistically, the south Indian or Dravidian population has different language (Australio-asiatic) roots (Proto-Tamil) than the north Indian linguistic roots in Indo-European languages (Sanskrit). In psycholinguistic studies, among the words of a language, consonant-vowel (CV) skeleton dictates the cognitive recognition of the inherent meaning of the word. While consonants are known to appear to be more than vowels cross-linguistically, eliciting constrainment of lexical access by activating different areas of brain. The present work involves four major south Indian Dravidian languages (Tamil, Kannada, Telugu and Malayalam) against the Indo-European (Sanskrit) control language. The words representing verbs, body parts and kinship were used to derive relative position priming sets with the CV skeleton and cluster grouping trees were constructed and analysed. Among the parameters tested for (verbs, body parts or kinship), some languages showed significant similarity like Tamil and Telugu among the verbs and kinship, Tamil and Malayalam among the body parts words. The study helps in elucidating phonological and orthographic features of the CV skeleton of the Dravidian languages tested with respect to their recognition similarity.

1. Introduction

Indian population can be classified into ancestral north and ancestral south Indians who were found to be distinct genetically and linguistically from one another due to endogamous societies with strong founder effects (Egorova, 2010). This variation can be attributed to two major prehistoric migrations of humans in India and subsequent population admixture which was studied with respect to the genetic investigations (Rajalingam et al., 2008). The migrations of proto-Dravidian groups from north to South India to avoid linguistic dominance seem to be responsible for almost similar allele frequency profiles and might suggest a common ancestry and high gene flow during their coexistence (Vijaya, Kanthimathi, & Ramesh, 2008). The north Indian ancestry and south Indian Draviadian ancestry can be compared to the similar diversity among the Han Chinese and Europeans consisting of similar north-south distribution (Ali et al., 2014). The dispersal of modern humans in India can be used for investigating the older native inhabitants- the tribal people. The Soliga tribal people from Biligiri Rangana Hills was found to be remarkably different from other Dravidian speaking South Indian populations but exhibited genetic similarity to two Australian aboriginal populations confirming the out-of-africa wave of migrations over 70,000 years ago (Morlote, Gayden, Arvind, Babu, & Herrera, 2011). The

Dravidian Austroasiatic speakers coming out of Africa settled along the south and south East Asia during the Neolithic was established in the Y-chromosomal and mtDNA diversity (Chaubey et al., 2011).

Thus, majority of Indian languages can be traced to have originated from two categories that is Indo-European and Dravidian, so lot of phonic and semantic similarities are expected. In India more than 1000 languages are prevalent, either as Dravidian or Indo-European. Dravidian language belongs to a large family consisting of around 73 languages spoken by 222 million people in the subcontinent and Sri Lanka (Thompson, 1989). Major Dravidian languages of south India like Tamil, Kannada, Malayalm and Telugu apart from being neighbours, also share some common features- linguistic origin, tradition and history in the past. Many of the south Indian dynasties in the past have overlapped cross-lingustic geographical area and resulting in amalgamation of lexicon and borrowing of words among these languages. There have been common literary heritage which have been experienced by this are as well. For example, the ancient Sangam (Tamil) literature was produced as a collective contribution of mainly Tamil Nadu and Kerala while partially by Karnataka and Andhra Pradesh. Being a proto-dravidian literature, it naturally has antiquity and words further evolved among the southern languages (Caldwell, 1875). There are limited studies on the correlation of the linguistic features of a population with respect to their diversity using a small set of genetic markers. These genetic differences were found to correlate geographic factors than merely with linguistic factors. Language differences exhibit detectable effects on the DNA diversity at the genomic level than just geographical differences. The language barriers directly influence in maintaining genetic differences by acting as a barrier for reproduction (Belle & Barbujani, 2007).

Linguistic morphology deals with the collecting of the words using small pieces of words termed morphemes and these express various meanings without without undergoing inherent changes (agglutination) forming a characteristic agglutinative language. Major south Indian languages are agglutinative and thus have similar affixed grammatical category. Recent studies have shown that constituent letters process the words in alphabetical languages. Thus, to understand the visual word recognition, it is critical to assess the functioning and nature of the orthographic input code into the system. During visual word recognition, consonants and vowels affect the modulation process of assigning the letter positioning. Many computational models assume that the letter assigning process within words is similar to both vowels and consonants. This assumptions has been challenged by transposed letter effect and relative positioning effect. Transposed letter priming involves the study of words with respect to their non-word primes created by replacing two letters in the word resulting in form priming effect with respect to the orthographic controls (Manuel Carreiras, Vergara, & Perea, 2009). The division of labour hypothesis gives consonants more importance than vowels in lexical processing with cross-linguistic variation as the age of the listener and reader especially when an infant acquires their native language. The lexical level consonant bias influences visual word recognition than vowels in many languages (Nishibayashi & Nazzi, 2016). Since the visual inputs extract regularities in the words to extract the information and understand the information, the consonant-vowel (CV) combinations forming the skeletal structures (Perea, Marcet, & Acha, 2018).

Kolipakam et al., (Kolipakam et al., 2018) while analysing the phylogenetic study, collected 100 basic items representing the language from 100 concept elicitation list of Swadesh. They also reported as other reports about dictionaries artificially inflating the cognate sets having deep

histories and may have gaps resulting in artificial clusters during the phylogenetic analysis. They also used the synonymous cognate sets for the same concept while etymological dictionaries may result in words which have undergone significant changes in meanings. Even if the dialects of the Dravidian languages are omitted, the underlying similarity of dissimilarity among the lexicon of these languages needs a better understanding. Thus in this paper, we have studied the distributional and phonetic concepts with respect to the psycholinguistic parameters to draw a similarity path among some of the classical languages of India especially Dravidian. In this work, (in conjunction with (Kolipakam et al., 2018)) similar words and their meanings in major South Indian languages like Tamil, Kannada, Telugu, Malayalam and Tulu have been characterised with respect to Sanskrit (and Indo-European language).

2. Materials and Methods

The specific word list to denote the verbs, body parts and family were collected from the four major dravidian languages (Tamil, Kannada, Telugu and Malayalam) along with an inner control (Tulu) and an outer control (Sanskrit representing Indo-European language) as given in table 1, table2 and table 3.

Table 1: Verbs represented in Dravidian lexicon

Sl. No.	English	Telugu	Tamil	Malayalam	Kannada
1	to drink	తాగు (tāgu)	குடி (kudi)	കുടി (/kuʈi/)	ಕುಡಿ
2	to eat	తిను (tinu)	உண் (oon), (thin)	കഴി (/kaɻi/),	ತಿನ್ನು, ಉಣ್ಣು
3	to bite	కొరుకు (koruku), కరచు (karacu)	கடி (kadi)	തിന്ന് (/t̪innɨ̆/),	ಕಡಿ
4	to spit	ఉమ్ము (ummu)	துப்பு (thuppu)	ഉണ്ണ് (/uɳɳɨ̆/)	ಉಗುಳು
5	to vomit	కక్కు (kakku)	கக்கு (kakku)	തുപ്പ് (/t̪uppɨ̆/) / കക്ക് (/kakkɨ̆/),	ಕಾರು
6	to laugh	నవ్వు (navvu)	சிரி (ciri), (nagai)	ചിരി (/t͡ʃiri/)	ನಗು
7	to hear	విను (vinu)	கேள் (kēḷ)	കേൾക്ക് (/keːɭkkɨ̆/)	ಕೇಳು
8	to know (a fact)	తెలుసుకొను (telusukonu), / ఎరుగు (erugu)	அறி (aṟi)	അറിയ് (/arijɨ̆/)	ತಿಳಿ
9	to think	ఆలోచించు (ālōcincu)	நினை (niṉai)	നിനയ്ക്ക് (/n̪inajkkɨ̆/)	ಯೋಚಿಸು
10	to fear	బెదురు (beduru), భయపడు(bhayapaḍu)	அஞ்சு (añju)	പേടിക്ക് (/peːʈikkɨ̆/)	ಹೆದರು
11	to kill	చంపు (caMpu)	கொல் (kol)	കൊല്ല് (/kollɨ̆/)	ಕೊಲ್ಲು
12	to fight	పోరాడు (pōrāḍu)	சண்டைப் போடு (saṇdai	പൊരുത് (/porut̪ɨ̆/), /	ಹೋರಾಡು

			pōdu), (poradu)	പോരാട് (/po:ra:ṯɨ̆/)	
13	to dig	తవ్వు (tavvu)	தோண்டு (thondu)	കുഴിക്ക് (/kuɻikkɨ̆/), / തോണ്ട് (/ṯo:ṇṯɨ̆/), മാന്ത് (/ma:ṉṯɨ̆/)	ತೋಡು
14	to swim	ఈదు (īdu)	நீந்த (neenthu)	നീന്ത് (/ṉi:ṉṯɨ̆/)	ಈಜು
15	to fly	ఎగురు (eguru) (intransitive), / ఎగరవేయు (egaravēyu) (transitive)	பற (paṟa)	പറക്ക് (/parakkɨ̆/)	ಹಾರು
16	to stand	నిలుచొను (niluconu), నిలబడు (nilabaḍu)	நில் (nil)	നിൽക്ക് (/ṉilkkɨ̆/), / നിക്ക് (/ṉikkɨ̆/)	ನಿಲು
17	to squeeze	పిసుకు (pisuku)	கசக்கு (kasakku), (pisuku)	ഞെക്ക് (/ɲekkɨ̆/), / ഞെരുക്ക് (/ɲerukkɨ̆/), / പിഴി (/piɻi/)	ಹಿಚುಕು
18	to wash	కడుగు (kaḍugu)	கழுவு (kaḻuvu)	കഴുക് (/kaɻukɨ̆/)	ತೊಳೆ, ಒಗೆ, ಕುಸುಬು
19	to push	నెట్టు (neṭṭu), తోయు (tōyu)	தள்ளு (thallu)	തള്ള് (/ṯaḷḷɨ̆/), / തള്ള് (/ṯeḷḷɨ̆/)	ನೂಕು
20	to tie	కట్టు (kaṭṭu)	கட்டு (kaṭṭu)	കെട്ട് (/keṭṭɨ̆/)	ಕಟ್ಟು (kaṭṭu)
21	to sing	పాడు (pāḍu)	பாடு (pādu)	പാട് (/pa:ṭɨ̆/)	ಹಾಡು
22	to float	తేలు (tēlu)	மித (mitha)	പൊങ്ങ് (/poŋŋɨ̆/), / പൊന്ത് (/poṉṯɨ̆/)	ತೇಲು

Table 2. Body parts words from Dravidian lexicón

S.no	English	Telugu	Tamil	Malayalam	Kannada
1	blood	రక్తము (raktamu), / నెత్తురు (netturu)	குருதி (kuruthi)	ചോര (/ʧo:ra/)	ನೆತ್ತರು (nettaru)
2	Bone	ఎముక (emuka), బొమికె (bomike), బొక్క (bokka)	எலும்பு (elumpu)	എല്ല് (/ellɨ̆/)	ಎಲುಬು (elabu)

3	fat	కొవ్వు (kovvu)	கொழுப்பு (koluppu)	കൊഴുപ്പ് (/koɻuppɨ̆/)	ಕೊಬ್ಬು (kobbu)
4	head	తల (tala)	தலை (talai)	തല (/t̪ala/), / മുടി (/muʈi/) (from head hair)	ತಲೆ
5	Tongu e	నాలుక (nāluka)	நாக்கு (nākku)	നാക്ക് (/n̪a:kkɨ̆/), / നാവ് (/n̪a:ʋɨ̆/), / മൊഴി (/moɻi/)	ನಾಲಗೆ
6	nose	ముక్కు (mukku)	மூக்கு (mūkku)	മൂക്ക് (/mu:kkɨ̆/)	ಮೂಗು
7	ear	చెవి (cevi)	காது (kātu)	ചെവി (/t͡ʃeʋi/), / കാത് (/ka:t̪ɨ̆/) / കണ്ണ് (/kaɳɳɨ̆/),	ಕಿವಿ
8	eye	కన్ను (kannu), నేత్రం (netram)	கண் (kaṇ)	കണ്- (/kaɳ-/), / മിഴി (/miɻi/)	ಕಣ್ಣು
9	Tooth	పన్ను (pannu)	பல் (pal)	പല്ല് (/pallɨ̆/)	ಹಲ್ಲು
10	Foot	పాదము (pādamu), / అడుగు (aḍugu)	அடி (adi), பாதம்	അടി (/aʈi/), / കാലടി (/ka:laʈi/)	ಅಡಿ
11	leg	కాలు (kālu)	கால் (kāl)	കാല് (/ka:lɨ̆/), / കാൽ- (/ka:l-/)	ಕಾಲು
12	knee	మోకాలు (mōkālu)	மூட்டு (mooṭṭu)	മുട്ട് (/muʈʈɨ̆/)	ಮಂಡಿ
13	hand	చెయ్యి (ceyyi), చేయి (cēyi)	கை (kai)	കൈ (/kaɪ/)	ಕೈ
14	guts	పేగులు (pēgulu)	குடல் (kudal)	കുടല് (/kuʈalɨ̆/), / കുടൽ (/kuʈal/)	ಕೆಚ್ಚು (keccu)
15	horn	కొమ్ము (kommu)	கொம்பு (kompu)	കൊമ്പ് (/kompɨ̆/)	ಕೊಂಬು (koṃbu)
16	tail	తోక (tōka)	வால் (vāl)	വാല് (/ʋa:lɨ̆/), / വാൽ- (/ʋa:l-/)	ಬಾಲ (bala), ತೋಕೆ (tōke)
17	wing	రెక్క (rekka)	இறக்கை (irakkai)	ചിറക് (/t͡ʃirakɨ̆/)	ರೆಕ್ಕೆ

Table 3. Kinship words from Dravidian lexicón

S.no	English	Telugu	Tamil	Malayalam	Kannada
1	woman	ఆడది (āḍadi),/ స్త్రీ (strī), / మహిళ (mahiḷa)	பெண் (peṇ)	പെണ്ണ് (/peɳɳɨ̆/), / പെണ്- (/peɳ-/)	ಹೆಂಗಸು, ಹೆಣ್ಣು (hengasu)
2	child	పిల్ల (pilla) (female), / పిల్లవాడు (pillavāḍu) (male)	குழந்தை (kuḻantai), / பிள்ளை (pillai)	കുട്ടി (/kuʈʈi/), / കുഞ്ഞ് (/kuɲɲɨ̆/), / പിള്ള (/piɭɭa/), / കിടാവ് (/kiʈa:ʋɨ̆/)	ಮಗು (magu), ಕೂಸು (koosu)
3	wife	పెళ్ళాం (peḷḷāM), భార్య	மனைவி (maṉaivi)	കെട്ടിയവള് (/keʈʈijaʋaɭ/), /	ಹೆಂಡತಿ (heNDati), ಮಡದಿ (maḍadi)

		(bhārya), ఆలి (āli)		മണവാട്ടി (/maɳaʋaːʈʈi/) (bride)	
4	mother	అమ్మ (amma), / తల్లి (talli)	அம்மா (ammā)	അമ്മ (/amma/), / തള്ള (/t̪aɭɭa/)	ಅಮ್ಮ (amma), / ತಾಯಿ (thayi)
5	father	నాన్న (nānna), / తండ్రి (tandri)	அப்பா (appā), / தந்தை (thandhai)	അച്ഛൻ (/at͡ʃt͡ʃʰan/), / അപ്പൻ (/appan/), / തന്ത (/t̪an̪t̪a/)	ಅಪ್ಪ (appa)

Relative position priming effect can be achieved by subset priming the words using some of its letters maintaining their relative positions with respect to consonants and vowels. In the transposed letter priming, the transposed letters in a word form a non-word with respect to the appropriate orthographic controls. During different priming experiments reported using various priming paradigm, it was seen that the sub-set priming of the letters in a target word (facilitates the target word recognition by retaining their relative positioning). With respect to various reports, relative position priming and subset priming can be considered similar in effect (as they produced priming effect having same magnitude when non-word primes were generated as prime strings) and the terms can be used interchangeably. The roles of vowels in rhythmic class and syntactic structure and consonants in lexicon constrainment resulted in subset primes of vowels and consonants eliciting different patterns. Cross-linguistically, certain consonant combinations appear more numerously then vowel combination and appear to be imposing higher lexical constraint (Lexical Constraint Hypothesis) (Duñabeitia & Carreiras, 2009). The readers often are observed to represent the regularities in a word by CV skeletal structures leading to visual recognition of words in perceptual process initially which was found to be independent of influence of lexicon (Acha & Carreiras, 2014).

Many Dravidian languages like Malayalam are computationally able to form root word of (verb) and can form few thousand inflected words- but only few surviving out of it as a typical corpus especially while analysing verb morphology (Saranya, 2008). During the search for differential or similar treatment of kinship terms in the old worlds especially with respect to the possibility of isolation of Dravidian lexicon, Emeneau (Emeneau, 1953) reported some interesting results. The Burushaski of Gilgit-Baltistan showed exceptional similarity to the proto-Tamil especially with respect to terms of kinship, names of body parts and other nouns supporting the hypothesis of possible proto-Dravidian coverage till the Himalayan region speaking Burushaski. But the similarity of present Dravidian languages with respect to the Kinship terms and Body parts needed better elucidation.

In the present study, the words were distributed into matrices of each section (verbs, body parts and family) using the relative position priming in the Consonant-Vowel (CV) skeleton. Each word is then further represented into binary numeral system (base-2 numeral system) with respect to the presence or absence of CV skeleton among the comparative language matrices representing the consonant or vowel chain in the language. The words with multiple representatives among the languages were screened for similar phonetic words.

Peperkamp (Peperkamp, 2004) suggested that the change in loanword adaptations are usually in accordance with the borrowing language native phonology, especially when these are distinguished as phonological and non-phonological adaptations. Psycholinguistically, these

integrated loanwords are adapted to suit in the borrowing language lexicon with continuous adaptations to change the non-native sound structure. Dendrograms were constructed using the final matrix by using PAST3 software. UPGMA paired group algorithm was used with Euclidian similarity index with no constraints. The tree was constructed with 1000 bootstraps. The words with close relation cluster together while those cluster away can be represented as unrelated. The construction parameters included words and languages separately in understanding the relationship between the words and Dravidian languages.

Results and Discussions

The comprehension of language implies isolation of words, extraction of their meaning and using them in specific combination to form sentences using understanding of the basic rules. The words are sounds to give grapheme (written) tophonene (spoken) to represent meanings to written to spoken language. The collective word storage in our cognitive system throughout our life experience that we access use in our written and spoken language is termed as the mental lexicon, thus representing structural and cognitive (phonological and orthographic features from auditory and print representations) aspects of language (Acha & Carreiras, 2014). Consonants have been well established to be more important than vowels in constraining lexical access. Phonologically, consonants and vowels can be separated into different categories with variable production of vowels than consonants as vowels are more harmonized within the words than consonants. Most of the world languages use more consonants than vowels in their lexicon. Thus the importance of consonants seems to be more than vowels in lexical processing while importance of vowels than consonants with respect to the information of prosodic syntax (Delle Luche et al., 2014). Duñabeitia and Carreiras (Duñabeitia & Carreiras, 2009), reported the subset priming effect when primed with consonants not vowels showing the asymmetry in letter frequency. Although consonants and vowels are integral phonological parts of all languages, it is evident that consonants are numerous and have inherent bias by the reader/listener. This may be due to the highly discriminable nature of consonants than vowels activating different brain areas (Nishibayashi & Nazzi, 2016). The influence of similarities in phonology in lexical priming is understudied. There have been evidences among the diversity of auditory tasks where, overlaps in the syllable prime between prime and target leads to facilitation of word recognition due to aggregate pre-lexical excitation due to phonological similarity among the prime and target (Turnbull & Peperkamp, 2017).

Using word-based instead of nonword-based priming helps in investigations of processes which occur during activation and selection of lexicon. This method tests the influence of word frequency and number of neighbours on the word selection from the lexicon (Acha & Carreiras, 2014). Carreiras et al (Manuel Carreiras et al., 2009) studied the Event related potentials (ERPs) are records of voltage changes from the scalp extracted as electro-encephalogram with respect to the time-locked stimuli-inset responses. ERPs have been used by many authors to investigate the word letter assignment of consonants and vowels with respect to relative position priming effect. The contribution of consonants and vowels in letter assignment results in different time courses and these differential impacts on ERP can be recorded. The results of ERP studies suggested that coding was triggered by consonants and not vowels (atleast not at the same extent). But both consonants and vowels are important factors in the initial stages of visual word recognition by eliciting different patterns of lexicon activation (M. Carreiras, Duñabeitia, & Molinaro, 2009). During ERP studies, changing vowels with respect to consonants resulted in activation

increments in the right middle temporal area of the brain which has been established with prosodic processing of speech input. Thus it is consistently seen that the consonant substitution is lesser than the vowel substitution during the visual word recognition event as it may result in different modulation of words in many languages (M. Carreiras, Duñabeitia, et al., 2009; M. Carreiras, Seghier, et al., 2009; Manuel Carreiras et al., 2009; Su, Jiang, & Abulizi, 2015).

Among the Dravidian languages used, when dendograms were constructed some of the words showed significant similarity even when Sanskrit was used as one of the languages in the test. Certain Verbs show similar consonant construction and thus exhibit clustering together in the dendogram (like- 'to sing' and 'to laugh', 'to stand' and 'to think'), verbs like 'to fight' and 'to tie' cluster together and were further related to- 'to kill'. Among the listed words of Dravidian languages when compared with Sanskrit some of the words showed similar clustering hence, exhibiting higher conserved parameters for the vowels used in the verbs. These words include- 'to laugh'-'to sing', 'to tie'-'to dig', 'to vomit'-'to swim', while some words showed branch clustering together like-'to wash'-'to fear', and 'to kill'-'to hear'. Verbs like 'to laugh', 'to sing', 'to drink', 'to eat' and 'to know' clustered separately with respect to vowels used among all the Dravidian languages. These words of verbs clustering within Dravidian lexicon exhibits the conserved nature of these words among themselves with respect to Sanskrit. The newer branches from Dravidian languages like Tulu used here show admixture of borrowed words from Indo-European lexicons. In this work, we used relative position priming of CV skeleton instead of non-word based priming.

In the above given figure 1, it is evident that Tulu as a language has different clustering than the majpr Dravidian languages used with respect to the Verbs. This may be due to Tulu's continuous evolution or its borrowing lexicon from Indo-European languages like Sanskrit. Sanskrit has given a out group with respect to Dravidian languages. In using consonants of the verbs Telugu and Tamil stand together and related to Kannada (74%). Malayalam and Tulu make significant outgroup among Dravidian languages (>70%). In the tree formed with verbs of selected Dravidian languages, the nearest languages have clustered with respect to the vowels used in the words. Here, Malayalam and Telugu formed a single branch (77%) which is related to Tamil (45%). The Kannada out group (94%) among these prominent languages in using vowels for verbs show its diversification with respect to the more related repertoire of words in Tamil and Malayalam. Position of Tulu in the given tree- more diversified than even Sanskrit shows its experiments and mixing with Sanskrit and Dravidian languages. Sagar et al (Sagar & Abirami, 2014) reported that if a sentence parcer was given irrespective of syntactic correctness or not it depends on the noun and verb agreement especially in Dravidian languages like Kannada.
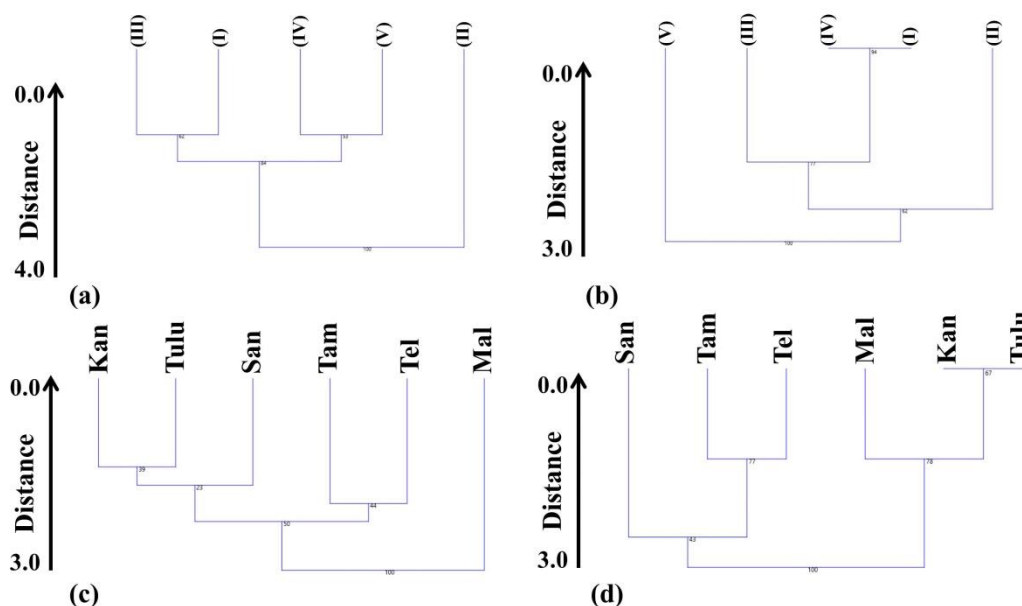
Figure 1. Linking of verb words among Dravidian languages with respect to vowels (a and c) and consonants (b and d).

Consonants are the first elements that are initially coded in the initial stages of visual word recognition process while somehow vowels are ignored. Consonants are numerous and less variable than vowels with respect to combinability and positioning- thus providing orthographic regularities among inputs as structure of consonants are more stable than structures of vowels in word skeleton. In the early stages of word processing, the vowels are processed slower than consonants suggesting that during early lexical processing, consonant skeletons are key factors than CV skeletons (Duñabeitia & Carreiras, 2009). In a word, the consonant skeleton is a key element in word processing than CV skeleton (Perea et al., 2018).

In this work, the clustering of Dravidian words differently with respect to consonants supports this and shows the use of CV differently by brain during completion of word similarities in relationship to their relatedness. In the above given figure 2, Sanskrit has given a out group with respect to Dravidian languages. In using consonants of words denoting body parts Tamil clustered closely with Malayalam (90%) while weak clustering with Telugu (42%) and Kannada (51%). In figure 2, Tamil clustered with Malayalam very closely (86%), while Kannada clustered closely with Telugu (86%) and both of them showed Sanskrit influence as they co-clustered with Sanskrit (51%) and both the major clusters showed significant difference.

In the above given figure 2, the consonants in the words used to refer body parts were analysed with respected to clustering influence of Sanskrit and those words clustering together are more conserved.
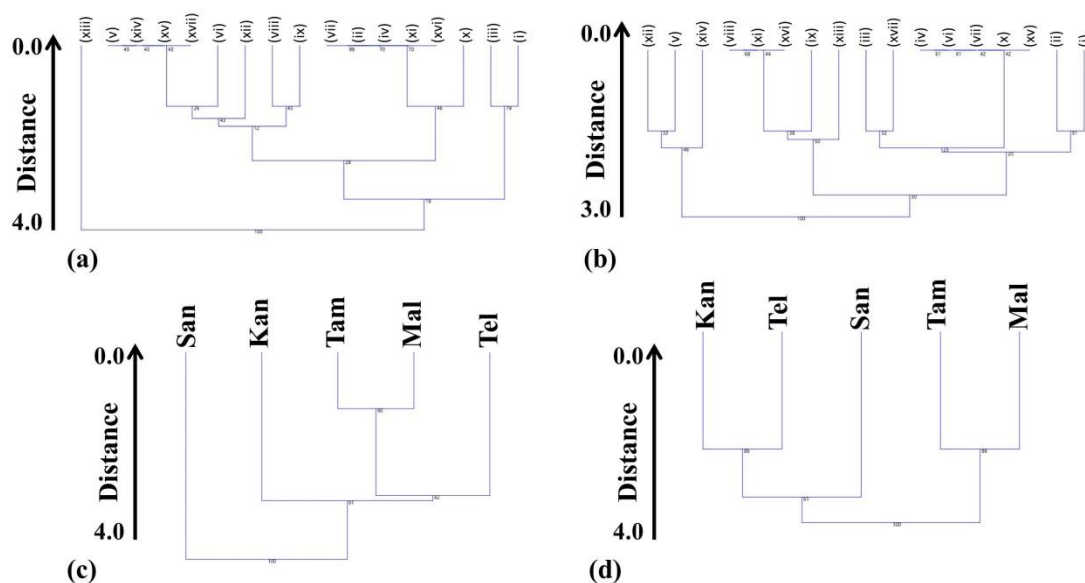
Figure 2. Linking of words of body parts among Dravidian languages with respect to vowels (a and c) and consonants (b and d).

The words like-blood-fat, tooth-eye, bone-head, wing-horn-guts-tongue, and leg-tail-ear clustered together with highest similarity. Some of the words clustered together as a different branch in the Dendogram created-tongue, guts, horn, wing, nose, eye, tooth, knee. In the figure 2, the vowels used in the words to denote body parts compared with Sanskrit, the words like head, ear, horn, foot and along with nose, bone-blood, leg-tail along with eye, leg-tail along with guts, and fat-wing clustered together. With respect to the vowels in the words used to denote body parts, words like leg-tail-eye and hand cluster separately than the remaining words used in construction of the tree. The languages- Tamil and Malayalam are extremely similar in this aspects and is evident in the clustering pattern of the two languages in both consonant and vowel clustering.

The words selected here are some of the words which were reported by Emeneau (Emeneau, 1953) and are possessed by the plural first person exclusively, are statistically more common in actual kinship usage. These words have been used by people in identifying their kin as outside or within the family with respect to the person referred and speaker and keep no ambiguity about the sex of the subject in context.

In the figure 3, among the Dravidian languages, the words used for child-mother (>62%) and father-woman (>48%) clustered together. The word used for wife clustered significantly separate among the Dravidian language without the influence of Sanskrit. In the figure 3, among the Dravidian languages, the words used for father-mother (>94%) which was clustering with word for child (>33%) and wife (>56%) nearby. The word used for woman clustered significantly separate among the Dravidian language without the influence of Sanskrit.
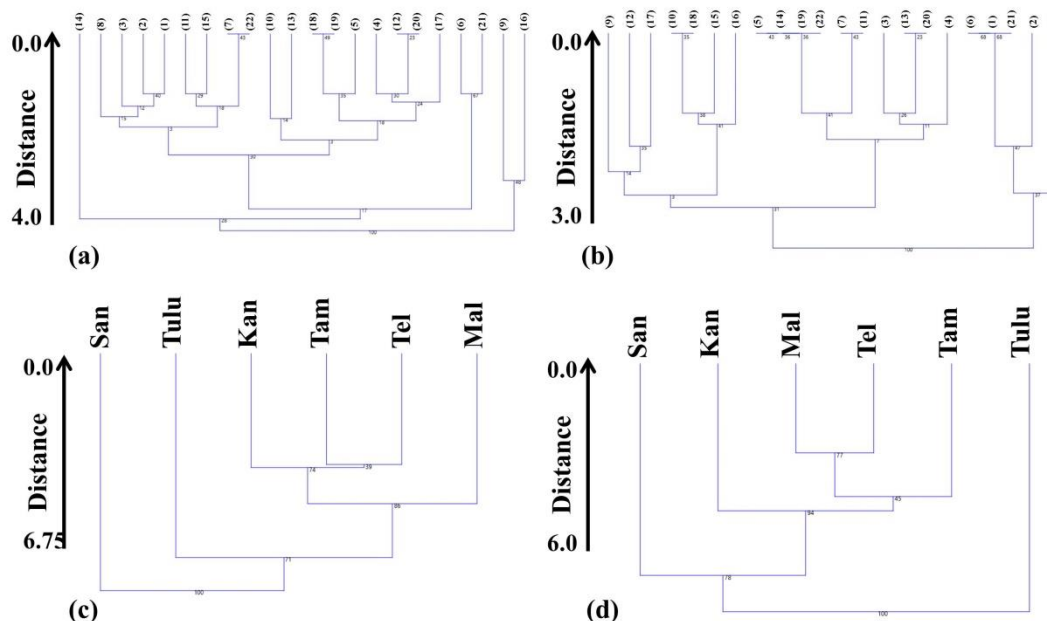
Figure 3. Linking of kinship words among Dravidian languages with respect to vowels (a and c) and consonants (b and d).

In figure 3, the words used to denote family members in Dravidian languages compared with respect to Sanskrit, these words, when compared with respect to the vowels and consonants they have exhibit similar results in both vowels and consonants comparisons Tamil –Telugu (>44%) and Kannada-Tulu (>39%) clustered together. Here the borrowing of words by Tulu from Kannada lexicon is evident as in case of Tamil and Telugu. While Sanskrit and Malayalam clustered differently. The proto-Dravidian words form differential treatment of kinship terms especially as a subclass of 'inalienably possessed' forms. It was also seen that some kinship terms (denoting spouses or relatives or affines of man or woman) show no ambiguity of the sex of the possessor even with respect to the context used (Emeneau, 1953).

The genetic structures of Indian populations have been influenced by social structures, caste system and endogamy and major population migrations (movements) (Watkins et al., 2008). The mixing of the later migrations of humans after the first out of Africa theory is also influenced by the subsequent invasions and migrations like Huns, Greeks, Kushans and Moghuls (Kivisild et al., 2003; Trivedi et al., 2008). The genetic studies done on the Indian population of the present day suggested the branching of the genotypic and phenotypic features along with the linguistic differences leading to an immense diversity among the population especially in the north where significant mixing has been observed (Passarino, Semino, Bernini, & Santachiara-Benerecetti, 1996). While the Dravidian population possess phenotypic similarities termed 'Negrito' (physical characteristics from east Africa) and mtDNA M-haplogroup (which can be due to convergence ancestry). Among these Dravidian populations, Genetic drift has been an important evolutionary factor shaping the genetic variation among the indigenous south Indian tribal populations (Vishwanathan et al., 2004).

With respect to the all India averages of consanguineous marriage (11.9% with mean coefficient of inbreeding of 0.0075) is much lower than most of the south Indian states like Karnataka (29% with mean coefficient of inbreeding of 0.0180) and erstwhile Andhra Pradesh (30.8% with mean coefficient of inbreeding of 0.0212) while other states showed remarkably lower consanguineous marriages like Kerala (7.5% with mean coefficient of inbreeding of 0.0045) (Bittles, 2002). This is evident in the remarkable conservation of words for families as seen in Tamil Telugu and Kannada while lesser extent with Malayalam and Tulu. The studies on Dravidian Kinship terms suggests that with respect to proto-Tamil, modern-Tamil has lost the featured usage of pronomial possessives as plural forms but forming no difference even in other Dravidian languages. There has also been morphophonemic replacement of identical consonant clusters periodically by a single consonant. While during a starting vowel usage, the next morpheme required a specific gliding consonant beteen the vowels but not forming elision or contractions (Usage of elision is occasionally used in modern terms in first of the two vowels in usage (Emeneau, 1953).

A neurobiological model of local combination detector (LCD) distinguishes between the letter identity and order processes with respect to the prevailing neurobiological constraints and new coding system development helping in computational models for visual word recognition process. Most of these models proposed for analyzing the word recognition have assumed that processing of consonants and vowels is same- which may not be the case. Behavioral research have shown previously that relative positioning priming effect failed when vowels are manipulated than high and low frequency consonants in the words (M. Carreiras, Seghier, et al., 2009). Luche et al.,(Delle Luche et al., 2014) showed that the advantage of consonant was their independence from the distributional properties of languages with vowels facilitating additionally in some cases.

While studying the mtDNA of the genomes of Jenu Kuruba and Betta Kuruba tribes of South Karnataka, Car Nikobarese and Jarawa tribes of Andaman and Nikobar island, M2 haplogroups were found to be 64% in mainland while 37% of the haplogroup M36 in the islanders by populations tested. The M2 and M36 seem to have most recent common ancestor 44000(±8000) and 34000 (±9000) years ago respectively (Chandrasekar et al., 2009). While H, L and R2 are Indian subcontinent's endemic Y-chromosomal haplogoups occurring in both castes and tribal populations. The South Indian tribal groups Chenchus and Koyas exhibit M and N haplogroups coinciding with the early late Pleistocene settlements in India which were not replaced by later migrations (Kivisild et al., 2003). The mtDNA segment of HVS2 as described by Bamshad et al. (Bamshad et al., 1996) among the endogamous population also stratified social forces (and caste system). The gene of skin pigmentation- SLC24A5 was selectively distributed in non-dravidian populations of North India (Ali et al., 2014).

Conclusion:

Studying the relationship of Dravidian language families is important in understanding the history of Eurasia as India is situated on the cross-roads of movements of ancient populations into and through south Asia (Kolipakam et al., 2018). The results mimic the simple computing recognition among the consonant and vowel skeleton of different words- representing the word lexicon of the tested language. In this study, it was evident that the importance of consonants than vowels in defining the clustering similarity among the tested Dravidian languages with respect to auditory (phonetic) and written differentiation considered in comparison to the verbs, kinship and bodypart words tested here. When loanwords are adapted in a borrowing language,

the phonological grammer of the source language is also adapted leading to illegal phonological structures introduced into the latter. In constraint –based phonology, these adaptations are directly transformed into the pre-existing constraints available in the borrower language. Here these loanword adaptations are in conformity with the constraint based framework of the native phonology (Peperkamp, 2004). The method also helps in clearly differentiating the loanwords adapted in one language lexicon with respect to the other tested in comparison to.

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Formal and Functional Dichotomy: Contending or Complementing

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A B S T R A C T

Language is concisely spelled out in our Glossary as a "human system of communication that uses arbitrary signals, such as voice sounds, gestures, or written symbols." But frankly, language is too complex, fascinating, and mysterious to be adequately illuminated by a brief definition. Language is an inseparable part of our lives, and the study of language underpins the study of scores of disciplines. It is language which makes us "HUMAN". Since time immemorial numerous scholars have tried to unravel the mystery called 'Language'. There are mainly two significant approaches to the study of language: Functional and Formal approaches.

This papers concerns itself with two of the imperative approached applied to study human languages/s, namely: Formal and Functional approached. Both of these approached have their own methodological and epistemological spectrums. Here, in this paper an effort has been made to peer into the integrationist approach.

1. Introduction

Language is concisely spelled out in our Glossary as a "human system of communication that uses arbitrary signals, such as voice sounds, gestures, or written symbols." But frankly, language is too complex, fascinating, and mysterious to be adequately illuminated by a brief definition. Language is an inseparable part of our lives, and the study of language underpins the study of scores of disciplines. It is language which makes us "HUMAN". Since time immemorial numerous scholars have tried to unravel the mystery called 'Language'. There are mainly two significant approaches to the study of language: Functional and Formal approaches.

This papers concerns itself with two of the imperative approached applied to study human languages/s, namely: Formal and Functional approached. Both of these approached have their own methodological and epistemological spectrums. Here, in this paper an effort has been made to peer into the integrationist approach.

2. Understanding Functional and Formal Approaches

In the broader sense: theoretical approach to description and explanation of linguistic phenomenon based on their various functions is considered as functional approach. It is concerned with linguistic texts. Any form of linguistic output is linguistic text (news paper,

creative writing etc.). Linguistic behaviour is highly important for functionalists. To them, language is nothing but behaviour or use. The following functions are generally investigated: topic vs comment, theme vs rheme, definiteness or animacy (animate vs inanimate) of noun phrase, the semantic roles (=> thematic relations) or syntactic functions of the expressions.

The basic assumption of functional grammar is that linguistic phenomenon cannot be explained sans examining their functions. Hence Functional grammar renders an alternative to (post) Structuralist attempts at describing linguistic phenomenon formally (i.e assuming the autonomy of Syntax).

Formalists focus centrally on linguistic form. Formalist is to characterize the structural possibilities of language, both universal and language-particular. Followers of this approach feel that the goal of linguistic theory is not description but explanation of linguistic output underlying. The most fully developed and a powerful version of the approach through form is that proposed by Chomsky and his battery of followers. This approach is mainly known as Generative Grammar approach. According to this approach, Linguistics should go beyond merely describing syntactic structures and aim to explain why language is structured in the way it is. Chomsky argued that, to do this adequately, it was imperative to make language description absolutely explicit. The prime aim should be the explanation of linguistic knowledge. This approach sets out to provide rules of this kind for the formation of grammatically correct sentences. One of the mottoes is to discover the rules which govern how constituents can be put together to form grammatically correct sentences, and to formulate these rules in a general way as possible (Ideally, so that they apply to all human languages rather than just individual language). This reminds me of a quote by J. Lyons (1966), "*Bloomfield: did more than anyone else to make Linguistics autonomous and scientific. The method that Bloomfield prompted was that of restricting the scope of linguistics to those aspects of language that could be described within scientific accuracy.*"

3. Integration of Formal and Functional Approaches

As mentioned above two basic approaches to linguistics are the formalist and the functionalist approaches. Both approaches are binding. However, because formal and functional linguists have avoided direct confrontation, the compatibility of their results is not very clear. There has been a deep cleavage between formalists and functionalists. According to Ray Jackendoff, there is a phonological dimension to the issues that divide Formalists and Functionalists. The wealth of interesting generalizations that are found in functionalists are fully compatible with generative grammar, which appears to be among major challenges to it. The major line of differences between the two camps with respect to the analysis of syntactic structure has a homologue in the phonological structure.

Chomsky's review of B.F. Skinner's 'Verbal Behaviour' triggered a path-breaking debate in Linguistics. Chomsky openly challenged Skinner's notion that language is something that is to be learned. This review by Chomsky invited both bouquets and brickbats. For Skinner, verbal behaviour is simply behaviour subject to the same controlling variables as any other operant behaviour. Chomsky completely threw this idea out of window. Skinner's approach focused on the circumstances in which language was used; for example, asking for cake was functionally a

different response than labelling something as cake, responding to someone asking for cake, etc. These functionally different kinds of responses, which required in turn separate explanations, sharply contrasted both with traditional notions of language and Chomsky's psycholinguistic approach. Chomsky thought that a functionalist explanation restricting itself to questions of communicative performance ignored important questions. (Chomsky-Language and Mind, 1968). This whole debate proved to be a harbinger of Innateness Hypotheses and Universal grammar. This hypothesis postulates the existence in the human brain of a “Language Acquisition Device”, equipped from birth with the set of linguistic rules that form the “Universal Grammar”, grammatical rules which are common to all human languages.

4. Discussion

Nature of linguistic knowledge is different in functional and formal linguistics. Functionalists green signal the role of experience and say that language is a learnt behaviour. They feel that one cannot acquire a language. Formalists eschew this idea. But language not only has computational or biological endowment but also emergent or adapted structure. Knowledge of language is not dependent on biological endowment only but also on adaptive faculty. As we know that CVCV is the most predominant syllable structure in the languages of the world. It is not sans any reason. This may be because our articulatory mechanism is used to it. Its usability is higher than any other syllable structure. It has to do with adaptability. And more than that sounds have to be used as easily as possible. This point can be further substantiated if we take the examples of classifier system in languages. Suppose a child who is acquiring a language which is replete with rich classifier system, s(he) has to really adapt that system to be really able to use the classifier system naturally.

One debate that has always occupied driver’s seat in the domain of Linguistics is that whether we should study Linguistics using natural science methods or social science methods. The functionalists treat it as a social science whereas the formalists treat it as natural science. A book by Trevor Pateman entitled “Language in Mind and Language in Society” convincingly essays to show that integration of both of these method; Natural and Social Science methods is significant to drive home the phenomenon called ‘Language’.

As a matter of fact, Language finds in human being a receptive culture for its replication and mutation. Language and human beings are inseparable from each other. Language is rarely left free to go its own way. Humans are liable to language rather than something of which they are capable and thus it is natural to them just like seeing.

Pateman rightly says:- *“ the boundary maintainers who want a clean demarcation line between science and philosophy are like the paranoid neighbour who object because my tree blossoms on his side of fence.”*

We must obey the law of change. Change is natural state for language. No cultural armour can save language change. It is just irresistible. At the same time, the powerful innate mechanism of language growth, triggered in the individual by social interaction, do not scatter achieved languages evenly across the space of logically possible languages. They channel it, preferentially towards certain structures. By way of simple example, consider that if sentences concatenate subjects(S) verbs (V) and objects(O), there are six logically possible sentence (word order) structures: SVO, SOV, V0S, VSO, OVS, OSV. A language could select for one of these

uniquely, or allow for alternatives up to complete free variation among the six. Insofar as the world's languages do not show a random distribution of these logical possibilities, we have prima facie evidence for channelling. Nativists explain such channelling in terms of how the human mind works; functionalists are broadly speaking those who feel challenged to explain the channelling as the result of communicative pressures. Language cannot be social just on the ground that it goes on between people. We catch virus from other people, but viruses are not social objects – Virology is not a social science at all. A child interacts with people around it and grows a language of its own. The similarity between the child's language and the language of people around it may make us feel that language has been learnt or at least caught. But it's just a fallacy.

Formalisation is one of the conspicuous traits of formalists. Formalisation is an account of formulation that is developed as a mathematical system, especially in linguistics, of a model of grammar. Formal grammar jettisons the notational criteria and relies on the formal tests alone. Formalists are of the view concerned that notations (of a rule, a theory and so on and in some way less explicit than a formal statement. A formal statement will not leave anything to the reader's imagination and background knowledge. But we should not put it into oblivion that formalisation is not explicitness as such. It is just a level of explicitness to be achieved precisely by abstracting form and formal structure. Formalism and notation should not be contradictory rather they should complement each other.

There is a line of distinction drawn between formal and functional approaches based on explanations. Indubitably, explanation is to Linguistics what bread and butter is to our daily life. There are generally two sorts of explanations in Linguistics: Internal and External. Former is identified with the generative program whereas later is glued to functionalists. An internal explanation in Linguistics is one in which a set of facts fell out as a consequence of the deductive structure of a particular theory grammar whereas an external explanation is one which a set of facts is derived as a consequence of principles outside the domain of grammar. But the fact is that both generativists and functionalists adopt both these types of explanations.

The main explanans (explanations) of generative grammar is internal. The ungrammaticality of sentence 1 can be explained by the fact that the rule of grammar fails to generate it.

(1)* I like she.

But the notion of ungrammaticality is itself internal to theory. Just pointing out this sentence as ungrammatical does not mean that we have explained anything about English. An internally consistent deductive system could be designed to rule sentence (1) as grammatical. But the judgement of native speakers is matched with the fact that they find it ungrammatical. In many explanations provided within generative grammar thus fit a weak form of the DN model. Take example of case filter. The case filter require overt noun phrase to be case marked. But for any complex phenomenon the initial conditions and the data to be explained are themselves typically fluid enough that giving them slight reinterpretation allows one to explain any failed deduction sans abandoning the proposed principle.

Some external explanations are well motivated, which is completely jettisoned by many generativists. The pressure for the parsing efficiency and pressure for syntactic and semantic structure to be in alignment have an effect on the grammatical structure. Internal explanations

are generally brushed aside in functional explanations. But they can be encountered in the literature on ungrammaticality. As we know that the central hypothesis of most functionalists is that grammarticalization is unidirectional. That is, it is claimed that we never find an affix upgrading to an auxiliary or an auxiliary upgrading to a true verb. It should be clear that unidirectionality is a grammar – internal hypothesis governing the evolution of grammatical forms , appeal to it are as much internal explanation as the Case Filter to explain the ungrammaticality of previously uninvestigated set of sentences. External explanation and the autonomy of Syntax (AUTOSYN: Human cognition embodies a system whose primitive terms are nonsemantic and nondiscourse-derived syntactic elements and whose principles of combination make no reference to system – external factors) are completely compatible. Syntax can be both autonomous and externally motivated. This can be understood with the analogy of the game chess which a la the rules of generative syntax form an autonomous system. Using a mechanical mechanism we can make a modal to generate the move in the game of chess but this cannot exclude the possibility that aspects the system were motivated functionally. A la the autonomy of syntax is not challenged by the fact that the speaker of a language can choose what to say at a particular time. The grammatical principles of syntax have an internal algebra but this fact however does not mean that the pressure or motivations from outside the system cannot lead to a change to changed internal algebra.

There has been two distinct approaches to the study of language universals: Formal and Functional. One is pioneered by Noam Chomsky and the other by Joseph H. Greenberg. It is Greenber who initiated the interest in working on language universal on the basis of a wide range of languages. Chomsky triggered the study of language universals within the mainstream transformational generative grammar. The approaches adopted by these two linguistic leviathans are two major methodological approaches to language universals that have been adopted in linguistic works. There are scores of parameters through which these two approaches can be compared. The most weighty of thsse being the following: the data base for research on language universals (a wide range of languages, or just a single language); the degree of abstractness of analysis that is required in order to language universals (for instance, in terms of surface syntactic structures or in terms of deep syntactic structures); and the kind of explanations advanced for the existence of language universals. Linguistics of Greenberg camp feels that it is important to concentrate on universals stateable in terms of relatively concrete rather than very abstract analysis. They also have argued that, it is necessary that to have data from a wide range of languages.

Chomsky and his battery of followers earlier argued that the best way to learn about language universals is by the detailed study of an individual language. They have also advocated stating language universals in terms of abstract structures and have favoured innateness as the explanation for language universals. But one point is conspicuous that with the adamant of time this camp turned to the study of study of many languages. According to them, language universals would be those innate linguistic principles which facilitate the child's language learning task. There are certain language universals that simply cannot be predicted of an individual language. In particular Implicational universals (involves two linguistic properties related to one another as an implication, such as that if p then q). Statistical universals cannot be presented in a formal approach as well.

As presented above presentation of language universals with some sort of abstractness is related to Chomskian approach. But many of specific universals that have been proposed by Greenberg and those influenced by him require some degree of abstractness. Greenberg's original contribution to word order typology, by referring to such parameters as the relative order of subjects, verb and object in the clause, assumes that it is possible to identify the subject of an arbitrary clause in an arbitrary language. However, identification of a subject requires a certain amount of abstract analysis.

Commrie flagged off both the functional and formal approaches in the study of language. He presents that not all language universals can be given a functional explanation. He argues that some language universals do have viable and correct functional explanations. He substantiates his notion with an example that according to transformationalists, transformations are structure-dependent, i.e. are limited to performing operations in terms of constituent structure, rather than arbitrary string. This allows for instance a language to form yes-no question by inverting the subject and predicate, or the subject and finite verb, all of which possibilities are found in different languages. It prevents a language, however, from forming yes-no question by simply providing a left-right inversion of the word order for a string of arbitrary length so that the question corresponding to (1) would be (2).

(1) the man that killed the cat had an old gun.

(2) gun old an had cat the killed that man the?

According to Commrie, there is no functional explanation for why transformations in natural languages should be structure dependent. Stating the exception from the Universal number 15 in Greenberg (1966;111) which goes like this:-" in expressions of volition and purpose, a subordinate verbal form always follows the main verb as the normal order *except in those languages in which the nominal object always precede the verb."* Greenberg with this language universal focuses giant light on an interesting interplay between functional and formal factors in language structures. Functionally one would expect iconicity to override form, so that normal clause order would always reflect chronological order. However, formally, in a language which is otherwise rigidly verb final, it is simpler to have a rule that the verb of the main clause follows all constituents brushing aside their semantics.

5. Observations and Conclusions

Thus, any independent account of explanation for language universals must pay heed to both formal and functional factors. Pragmatic explanations can provide insight into the motivation behind the formal idiosyncrasies. It is imperative to establish the domain of functional versus formal explanations. Many aspects of language can only be appreciated in terms of the interaction of formal and functional factors.

As such we can see that no single approach can explain language completely. The line of distinction between these two approaches seems blurred when we try to explain certain linguistic phenomenon. The dichotomy needs to be reconsidered and a fusion of these two approaches should be welcomed.

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The Syntax of Comparative Ellipsis Constructions in EkeGusii

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ABSTRACT

The degree marker *Kogua* or *Goetania* 'exceed/surpass' which marks gradability in degree constructions in EkeGusii is morphologically ambiguos between a comparative and superlative reading. The language maps both the comaprative and superlative clause in the same way: both constructions attest the projection of a Degree Phrase (DegP) in the extended projection that involves comparative/superlative ellipsis or comparative/superlative deletion. This study notes that the comparative and superlative clauses behave like coordinated clauses besides being subordinative.

1.0 Introduction

Human languages code degrees such as identity, equality and their converses in relation to perceptual data received. Degree phrases and clauses are the surface realization of the perceptual experience of how two or more things differ in degree or scale that inform choices, such as a thing being big and further graded whether it is bigger (comparative degree) or the biggest (superlative degree). The constructions are considered to be universal though they can exibit some language particular variability which may call for the revision of the linguistic theories put to account for their form and meaning. The degree constructions that will be analysed in this paper are as given in (1) below.

(1) a. Morara nigo are [$_{\text{DegP}}$ omobou mono kogua ombati]
(Comparative)

Morara	n-igo	a-r-e	omo-bou		mono ko-gua
Morara	**FOC-PTL**	**1SG-is-FV**	**SAGR-huge**	**much**	**INF-exceed**

ombati

ombati

'Morara is more huge than Ombati'

b. *Morara nigo are* [$_{\text{DegP}}$ *omobou kogua kera omonto*] (Superlative)

Morara	n-igo	a-r-e	omo-bou	mono ko-gua

Morara FOC-PTL 1SG-is-FV SAGR-huge much INF-exceed
ombati

ombati

'Morara is more huge than everyone'

An examination of EkeGusii examples in (1) above indicates that aspects of ellipsis in comparative constructions are similar to some extent to those of Superlative constructions given that they are formed by complements being added to the standard marker *kogua*/*goetania* 'exceed/surpass' which undergo ellipsis.

The superlative constructions have not been analysed in a similar manner, given that they do not exhibit the same structural characteristics in the languages they have been studied in so far. In this study it is argued that in both cases there is deletion in the comparative or superlative complement which raises the problem of the constructions behaving as if syntactically they are both coordinative and surbordinative as has been argued by Moltmann (1992).

The study of the realization of gaps in comparatives and superlatives in EkeGusii has not been attempted as yet as far as I know. Ellipsis is one of those phenomenon that has begun to be given attention in Bantu languages, in relation to EkeGusii some work is being done on Coordinate ellipsis and sluices (Otieno, 2019), and there is an overview on coordinate ellipsis (cf. Otieno, Gesura & Ongarora, 2019).

This paper aims to analyse the syntactic structure of comparatve and superlative ellipsis in EkeGusii is a unified way in the syntax. The work presupposes current developments within the Generative tradition, especially the Minimalist Program (Chomsky, 1993/97 et.seq.).

2.0 Preliminaries

EkeGusii is a JE42 Bantu language (Guthrie, 1948; Bastin, 2003) spoken in Kenya. The language marks the comparative and superlative degree using lexicalized than-markers or quantity words: *kobua or kogua* 'exceed' and *goetania* 'exceeds' which are mutually exclusive in some contexts, and an equality marker using the similative/identity comparative *buna* 'as, like'.

3.0 Data[1]

The data for this paper was got by eliciting it from an informant in informal conversations. The informant is native speaker and a retired teacher of Kikwetu (of EkeGusii as an indigeneous language).

3.1 Degree Constructions in EkeGusii

3.1.1 Comparatives

Comparatives are a subset of degree constructions and they fall into two major categories: equality comparaives in (2) below and inequality comparatives in (3) below. This paper will focus on the syntax of inequality constructions to the exclusion of the equality constructions.

(2) **Equality Comparative:**

Morara nigo are omonene buna Ombese ☖$_{CD.}$

Morara n-igo a-re omo-nene buna Ombese

Morara FOC-PTL 1SG-is 1SG-big as Ombese

'Morara ia as big as Ombese'

(☖$_{CE}$= are ☖$_{CD}$=d-omonene)

(3) **Inequality Comparative:**

a. Monari n-igo a-gu-et-e Ombese (ase) obonene

Monari FOC-PTL 1SG-exceed-FV Ombese (in) bigness

'Monari is bigger than ombese'

b. Monari n-igo a-re omo-nene ko-gua Ombese ☖$_{CD}$.

Monari FOC-PTL 1SG-is 1SG-big INF-exceed Ombese

---

[1] The Data Presentend will be given word-by-word Glosses using the following abbreviations:

FOC=focus SG=singular PTL=particle NEG=Negation Numbers 1, 2,...=EkeGusii Noun Class

FV=final vowel PRES=present PST=past PERF=Perfective SAGR=Subject

INF=Infinitive

'Monari is bigger than Ombese'

(☖$_{CD}$= are d-omonene)

EkeGusii inequality comparatives may be typologically be classified as a Type 4 'Exceed'/ Direct Object Comaratives' language in relation to inequality comparatives as per Stassen (1984, 1985). Stassen's typology focuses on inequality comparatives and is based on 110 languages which are categorized in six types of comparative constructions, viz fixed case comparatives which consist of Adverbial Comparatives (that are further cubcategorized into separative (Type 1), allative (Type 2) and locative (Type 3) comparatives) and direct Object Comparatives (Type 4); against derived case comparatives which consist of conjoined (Type 5) and particle (Type) comparatives. Under type 4 languages, that involve the standard Noun Phrase (NP) being realized as a direct object of a special transitive verb, which has the meening of 'to excel', 'to exceed', to be more than' or 'to surpas,' we have Swahili which is a Bantu language that shares some features with EkeGusii. In swahili the comparative predicate cosists of a mainverb which is subordinated with an 'exceed'-verb which is succeeded by a NP, as in the example in (4) below.

(4) Mti huu ni mrefu ku-shinda ule
Swahili

Tree this is big INF-exceed that

'This tree is taller than that tree' (Stassen, 1985, 44:(21))

The typology given by stassen does not cover the entire range of comparative constructions in Kiswahili though, nor does it make the association of the similarity that is possible with the form of the superlative in the language. I will not go into that in this paper.

The EkeGusii standard marker *kobua* 'exceed' can be combined with *bun*a in the surface to mark comparison as in the sentences in (5) below

(5) a. *Monari nigo are omonene kobua buna areenge*

Monari n-igo a-re omo-nene ko-bua buna

Monari FOC-PTL 1SG-is 1SG-big INF-exceed as/like a-re-eng-e ☖$_{CD}$.

1SG-is-PST-e

'Monari is bigger than he was'

(☖$_{CD}$= are d-omonene)

b. *Obuya bwa ombese nigo*

Obuya bwa Ombese n-igo bo-r-e obonge
Goodness of Ombese FOC-PTL PL- SAGR-is-fv much g-oetania Monari a-rengerer-et-I ☖$_{CE}$ ☖$_{CD.}$

INF-exceed Monari 1-think-PERF-Fv

'The goodness of Ombese is more than Monari thinks'

(☖$_{CE}$= bore ☖$_{CD}$= d-obonge)

In the example given in (5) above the comparative construction licences a case of Bare Argument Ellipsis(BAE) in the comparative ellipsis site.

The standard marker *Goetania* 'surpass/exceed' functions as comparative quantifier as shown in the examples in (6-7) below:

(6) *Mokua nasoma ebitabu ebiinge goetania* ☖$_{CD}$ *bombera*

Mokua n-a-som-a ebi-tabu ebi-inge go-etania
mokua FOC-1SG-read-FV 7PL-book 7PL-many INF-exceed

bombera

two

'Mokua read more than two books'

(☖$_{CD}$=d-ebitabu)

(7) **a.** *Mokaya nasoma ebitabu ebinge goetania* ☖$_{CD}$ *Sorobea* ☖$_{CE}$

Mokaya n-a-soma e-bitabu e-binge
goetania Sorobea

Mokaya FOC-1-read 7PL-book 7PL-many INF-exceed
sorobea

"Mokaya read more books than Sorobea"

(☖$_{CD}$=d-ebitabu) (☖$_{CE}$=asoma)

b. *Mokaya nasoma ebitabu ebinge goetania* ☖ *Sorobea asoma*

Mokaya n-a-soma ebi-tabu ebi-nge go-etania ☖ Sorobea

mokaya FOC-1-read 7PL-book 7-many INF-exceed sorobea

a-som-a

1SG-read

"Mokaya read more books than Sorobea"

(☖$_{CD}$=d-ebitabu)

3.1.2 Superlatives

The only difference between the comparative clause and the superlative clause is that the latter involves the use of quantifier predicate phrases which bear arguments that are modified by adverbs like kera 'every' as in (8) below.

(8) a. *Mokua nigo akonyua erongori enyinge mono kogua kera omonto* Δ_{SE} Δ_{SD}

Mokua n-igo a-ko-nyu-a e-rongori e-nyinge **Mokua FOC-PTL 1SG-INF-drink-FV 11PL-gruel 11PL-much**

Mono ko-gua kera omo-nto

Most INF-exceed every 1PL-person

'Mokua drinks much more gruel than every person'

b. *Mokua nigo aanchete erongori mono kogua kera omonto anchete* Δ_{SD}

Mokua n-igo a-anch-et-e e-rongori mono

Mokua FOC-PTL 1SG-INF-drink-PERE-FV 11-gruel much
ko-gua kera omo-nto a-nch-et-e

INF-exceed Every 1PL-person 1SG-INF-drink-PERF-FV

'Mokua drinks much more gruel than every person'

c. *Mokua nigo akonyua* Δ_{SD} *kogua kera omonto* Δ_{SE} *erongori* (RNR & ATB)

Mokua n-igo a-ko-nyua ko-gua kera omo-nto

Mokua FOC-PTL 1SG-INF-drink-FV INF-exceed every 1PL-person
e-rongori

11-gruel

'Mokua drinks much more gruel than every person'

d. *Mokua nigo anchete* Δ_{SD} *kogua kera omonto anchete erongori.* (RNR)

Mokua n-igo a-nch-et-e ko-gua kera omo-nto

Mokua FOC-PTL 1SG-like-FV INF-exceed e very 1PL-person a-nch-et-e e-rongori

1SG-like-Fv 11-gruel

'Mokua likes gruel than every person'

(9) a. *Mokua osomire ebitabu ebinge kogua kera omonto asomire* Δ_{SD}

Mokua o-som-ire e-bi-tabu e-binge ko-gua
Mokua 1SG-read-PERF 7PL-book 7PL-many INF-exceed
kera omo-nto a-som-ir-e

every 1PL-person 1-read-PERF-FV

'Mokua has rad many books than every person has read'

(Δ_{SD}=d-ebitabu**)**

b. *Mokua osomire ebitabu ebinge kogua kera omonto* Δ_{SE} Δ_{SD}

Mokua o-som-ire e-bi-tabu e-binge ko-gua
.

Mokua 1SG-read-PERF 7PL-book 7PL-many INF-exceed
kera omo-nto

every 1PL-person

'Mokua has read many books than every person'

(Δ_{SE}= asomire Δ_{SD}=d-ebitabu**)**

4.0 Theoretical Framework

The paper presupposes the analytic mechanisms for minimal computation posited in the Minimalist Program by Chomsky (1993 et. Seq.). The derivation of the degree constructions is driven by the basic operation of Merge. The notion of merge is divarcated along the levels of derivation, which begin with the derivation of categories in the Lexicon using pair merge (cf. Chomsky 2019 a; 2019b) then pushed to the Numeration which consists of the syntactic objects from from work spaces that involve computation as per the Phases in first merge undergoing further merge till the desired construction is externalized . Pair merge involve the merging of the roots with relevant features to form sets that are sent to relevant workspaces (or numerations).

In the framework developed in Problems of Projection (POP) (Chomsky, 2013), the Conceptual-Intentional (CI) interface is considered to be the basic driver of how syntactic objects are derived. The faculty of language is involved in compositionality processes, that merge the meanings or thoughts into syntactic objects using the available objects. It is here then assumed that the faculty of language consists of a semantic component, the C-I Interface, and the articulated form is the result of how the form is configured by the Sensory-Motor interface and unambiguosly interpreted upon externalization. The derivation of the constructions will be demonstrated in section (5.0) below.

5.0 Syntax of EkeGusii Comparative Ellipsis (Degree) Constructions

Degree constructions, here comparatives and superlatives, are accorded a unified analysis by the construal of a functional projection, Degree Phrase, in the literature (cf. Bresnan, 1973; Corver, 1997; Lechner, 2004). In the analysis of EkeGusii data the degree head (Deg^0) is an ampty slot to which a standard marker rises in the syntactic computation by the dictates of I-semantics or the conceptual-intentional interface. The standard marker *kogua* or *goetania* 'exceed' is ambiguous between a comparative and superlative reading. The syntax and semantics of the clause[2] rather than the morphological features determine whether the superlative or comparative feature is interpretable in the output. The distiction is determined by whether the complement of kobua is an argument that is assigned the functional role Object, that calls for a comparative reading; or it is succeeded by a positive or negative polarity item that licences a superlative reading.

In the derivation of the comparative clauses, the root clause is generated from a separate lexicon, in that it consists of an independent exotic C-T, with two phases, and the comparative clause is capital merged with it in a new workspace which introduces the comparative Kobua 'exceed' at the root as per the extension condition. The comparative and superlative constructions are not products of what was referred to as 'first merge'. The first bit of the clause, which is an IP phase comes from a distinct workspace, with its own lexicon, and is merged to the new phase, the CP.

[2] This is line with the view that the computation of the chains is determined exocentrically rather than endocentrically (by the lexicon) as Chomsky (20) holds in his paper Problems of Projection: Extensions.

The degree Phrase of the root clause does not express the superlative or comparative degrees, hence we can assume that it consists of a degree phrase slot that is empty and can only be valued once the necessary semantic valuation has been done upon transfer to the CI-interface. The degree valuation of the adjective in the root clause cannot be a product of base generation because that would involve some kind of look-ahead aspect of the derivational process. Hence, the superlative or comparative features are introduced in further internal merge of the root clause and the comparative clause. The measure quantifier is introduced in the narrow syntax by pair merging it with the Adjective. The analyses in the literature labell the final spellout as an AP, hence assuming that that the degree Phrase is deleted at the S-M interface before externalization. The projection of the degree features are checked, though not as proposed in feature checking theory (Chomsky, 1997)), under the head, Deg^0, is given as in (10 a and b) below.

(10) a. …[CP [C [AP [$DegP_1$ [Deg^0 <+ comparative/ superlative>][IP [NP [N …[v* [COP [AP[$DegP_2$ [Deg^0 d-x]]]]]]]]]]]

The choice of which of the phrases is projected to the output is usually determined by two considerations, whether one feature is stronger than the other in the case of feature weithing considerations, or which of the categories is the highest. The issue as to whether the Adjective Phrase or the Degree Phrase is the one which is projected seems not to be an issue that some analysts worry over. Below we argue that the degree phrase is the one which is projected in the root clause rather rhan the AP order to meet the homomorphic relationship between the semantics and syntax.

(11) a. …[AP omotambe [DegP [Deg^0 <+ comparative> d-omotmbe [CP [C kobua [IP [NP x [[AP omotambe [DegP [Deg^0 d-omotmbe]]]]]]

b. ...[DegP [AP omotambe[Deg^0 <+ superlative> d-omotambe[CP kobua [NP kera x]]]]]

The syntax of the comparatives is given in this paper as involving the projection of the Degree Phrase for comparatives and the superlatives in the output as analysed below in sections (5.1 and 5.2) respectively.

5.1 Formation of Comparative Constructions

In the literature, the focus has been on the grammatical properties of comparatives. Comparative clauses are considered to bear empty elements that are due to the effects of reduction processes such as comparative deletion (CD) (see 2a-c below), Comparative Verb Gapping (CVG) or Comparative Ellipsis (CE)(cf. Lechner, 2018; Kennedy & Merchant, 2000). The literature on ellipsis posits that comparative deletion is determined by the same principles that constrain *Across the Board Movement* (ATB), *Gapping* and *Right Node Raising* (RNR) in coordinate ellipsis constructions. The issue of such constructions depending on conjunct reduction is discussed below.

5.1.1 Comparative Deletion

Consider the process of deriving the comparative sentence as given in (12) below:

(12) *Moraa n' omotambe kobua Nyanchama*.

Moraa is tall exceed Nyanchama

'Moraa is taller than Nyanchama'

() WS1a [Moraa n'omotambe]

WS 1b [Nyanchama n' omotambe]

MERGE (Moraa n' omotabe, Nyanchama n' omotambe, kobua, WS2)→
[{kobua {Moraa n'omotabe Nyanchama n'omotambe kobua}}]

LABEL: [IP [NP Moraa [Cop n' [AP omotambe [DegP [d-omotambe [IP
[Nyanchama [Cop n' [omotambe [CP [Comp Kobua]]]]]

IM (kobua, Moraa n'omotambe Nyanchama n'omotambe kobua)→

{ Kobua { Moraa n'omotambe <kobua> Nyanchama n'omotambe kobua}}

LABEL: [IP [NP Moraa [Cop n' [AP omotambe [DegP d-omotambe[CP [Comp kobua [IP [NP Nyanchama n' [AP omotambe [DegP d-omotambe [CP [Comp
Kobua]]]]]

SPELL-OUT:

A-P: Moraa n'omotambe kobua Nyanchama

C-I: [IP Moraa [Cop n' [DegP d-omotambe [CP [Comp kobua [IP
Nyanchama] [DegP d-omotambe]

SEM: Moraa omotambe <d-tall$_M$ > kobua Nyanchama omotambe<d-tall $_N$>
where (d-tall$_M$>d-tall $_N$)

The externalized construction involves the deletion of the copies and the verbal extension and its Adjunct at the point of spell-out to the Sensory-Motor interface. In the output, the construction that is interpreted does not consist of an adjective phrase, but only the degree phrase. This is usually not evident in analyses that conflate the adjectival feature. So how is the adjectival feature rendered visible in the output? This could be due to the deletion of the AP and feature inheritance by the DegP, a process similar to what happens when the CP is deleted upon the internal merge of the nominal that occupies the subject position to fulfill the Extended Prejection Principle (EPP) as per Chomsky (1995; 2000).

In the examples given below, the sentences involve the deletion of the implicitly degree marked elements that are deleted in the comparative clause.

(13) Comparative Deletion

a.) *Enyomba eye nigo ere enene kobua Enyomba eria* $\square_{CE}\square_{CD}$

E-nyombe e-ye n-igo e-re e-nene ko-bua
e-nyomba **SG-house SAGR-this FOC-PTL SAGR-big INF-exceed SG-house** e-ria

SAGR-that

'This house is bigger than that one'

b.) *Enyomba eye nigo ere enene kobua enyomba eria ere* $\square_{CD}$

E-nyombe e-ye n-igo e-re e-nene ko-bua
7SG-house SAGR-this FOC-PTL 7SG-is SAGR-big INF-exceed
e-nyomba e-ria

SG-house SAGR-that

'This house is bigger than that one'

c.) *Enyomba eye nigo ere enene kobua enyomba ya Nyaboke* $\square_{CE}\square_{CD}$

E-nyombe e-ye n-igo e-re e-nene ko-bua
7SG-house SAGR-this FOC-PTL 7-is SAGR-big INF-exceed

e-nyomba ya Nyaboke

SG-house SAGR-that

'This house is bigger than that one'

The comparative in EkeGusii are considered in this study to be derived in by the process of comparative deletion licenced by the overt realization of the marker *Kogua* 'exceed/surpass' as in (14 a and b) below

(14) a. Monari n-igo a-re' omo-tambe mono**.**

Monari FOC-PTL 1SG-is-Fv 1-tall very

'Monari is very tall**'**

b. *Monari nigo are omotambe kobua Ombese* $\square_{CD}$

Monari nigo a-r-e omo-tambe ko-bua Ombese

Monari FOC-PTL 1SG-is-fv 1SG-tall INF-exceed Ombese

'Monari is taller than Ombese'

(☖$_{CD}$ =d-are omotambe)

c. *Monari nigo are omotambe kogua kera omonto* ☖$_{CD}$.

Monari n-igo a-r-e omo-tambe ko-gua
kera **Monari FOC-PTL 1SG-is-FV 1SG-tall INF-exceed**
every

omo-nto

'PL-person

'Monari is the tallest (than every person)'

(☖$_{CD}$ =d-are omotambe)

Such an analysis will work for the postive degree clause as given in (15) below.

(15) [$_{IP}$ [$_{DP}$ Monari [$_{I'}$[$_{FocP}$ n-igo [$_{AgrSP}$a- [$_{v'p}$ [$_{Cop}$ -re '[$_{DegP}$[$_{Deg'}$[$_{AP}$ omo-tambe [$_{QP}$[$_{Q}$ mono]]]]]]]]]]]

The positive clause does not project an than-XP phrase as in comparative clauses. For the inequal comparative clause we have the following analysis as in (16) below.

(16) a. *Monari n' omonene kobua osoro*

Monari n' omo-nene ko-bua Osoro ☖.

Monari is 1PL-big INF-exceed osoro

' 'Monari is bigger than Osoro'

b. Monari n' [$_{DegP}$ [$_{AP}$ omonene] [$_{Deg'}$ Deg^{o}$_{[+comparative]}$[$_{than\text{-}XP}$ kobua Osoro]]]

The comparative deletion approach to comparative formation was proposed by Bresnan (1973). Comparative deletion (CD) is considered to be an obligatory process that involves the removal of the gradable property from the comparative complement (reffered to as *than-XP*). The functional node is proposed to account for a constituent that gave Ross (1967) a problem in labelling in his discussion of the process of 'tree prunning'. The example of the representation by Ross of the comparative structure in English in (17) below.

(17) John is taller than Bill

[$_S$ [$_{NP}$ John [$_{VP}$[is [$_{ADJ}$ [$_{Adj}$ tall [er [? [than [$_s$ [$_{NP}$ Bill]]]]]]]]]]]

The analysis offered by Ross is based on the idea that comparatives, using English data with morphemes -*er…than* (reffered to as inequalities in current literature) and *'as…as'* (equitives) are Relative-Clause-like constructions that involve 'Pronominalization-like rules', that is, S-deletion under identity that obeys a set of constraints[3] given in Chapter 4 of Ross (1967). The process of deleting of the comparative element in than clauses. The processof comparative deletion consists in reodering a kind of underlying construction in which the standard particle is raised out of the deletion context.

(18) *Monari nigo are omotambe kogua Ombese* ☖$_{CD}$

Monari n-igo a-re omo-tambe [$_{CP}$ ko-gua Ombese]

Monari FOC-PTL 1SG-is 1SG-tall INF-exceed Ombese

'Monari is taller than Ombese'

(☖$_{CD}$= are d-omotambe)

Comparative Deletion also occurs in constructions that bear Reciprocals (19b) and Reflexives in (19 a) below.

(19)a. *Maria nigo eanchete kobua Nyaboke* ☖$_{CE}$

Maria n-igo e-anch-et-e ko-bua Nyaboke

Maria FOC-PTL REFL-like-PERF-FV INF-exceed Nyaboke

'Maria likes herself More then Nyaboke'

(☖$_{CD}$ =d-eanchete)

b. Abamura nigo baanchaine kobua abasubati ☖$_{CE}$

[3] The constraints include: The Complex NP Constraint (CNPC), a Coordinate Structure Constraint (CSC) and the Sentential Subject Constraint (SSC). Thes are restated below respectively:

The Complex NP Constraint (CNPC) Ross (1967: 161)

No element contained in the sentence dominated by a NP with a lexical head noun may be moved out of that noun phrase by a transformation

Aba-mura n-igo ba-ancha-ine ko-gua

1PL-boy FOC-PTL 1PL-like-RECIP INF-exceed

aba-subati

1PL-girl

'Boys like each other more than girls'

(☖$_{CD}$ =d-baanchaine)

c. *Mokua na Nyaboke nigo baanchaine kobua*

Mokua na Nyaboke n-igo ba-ancha-ine ko-bua

Mokua and Nyaboke FOC-PTL 1PL-like-RECIP INF-exceed

Onsoti na Kerubo ☖

Onsoti and Kerubo

'Mokua and Nyaboke like each other than Onsoti and Kerubo'

(☖$_{CD}$ =d-baanchaine)

5.1.2 Comparative Ellipsis

Comparative ellipsis (CE) involves the deletion of any sentential element which is not the comparative nominal in the comparative clause as shown in the cluses in a & b in (20) below. The complex case is that of the RNR example in (20c) in which an element in the root clause is deleted and by extension it flouts the Antecedent Containment Deletion constraint (ACD).

(20) Comparative Ellipsis

a) *Moraa nigo aanchete obokima kobua* ☖$_{CE}$ ☖$_{CE}$ *omochere* (ATB & Gapping)

Moraa n-igo aa-nch-et-e obo-kima ko-bu-a

Moraa Foc-PTL 1SG-like-PERF-FV 14PL-porridge INF-exceed

omo-chere

3PL-rice.

'Moraa likes porridge more than rice'

(☖$_{CE}$= Moraa, ☖$_{CE}$= nigo aanchete)

b) *Moraa nigo aanchete obokima kobua Nyaboke* ☖$_{CE}$ (Stripping/ Gapping)

Moraa n-igo a-anch-et-e obo-kima ko-bua **Moraa Foc-PTL 1SG-like-PERF-FV 14PL-porridge INF-exceed** Nyaboke

Nyaboke

‘Moraa likes porridge more than Nyaboke’

(☖$_{CE}$=nigo anchete obokima)

c) *Abanto abwo nigo baanchete* ☖$_{CE}$ *kogua baangete amarwa* (RNR)

Aba-nto a-bwo n-igo ba-anch-et-e ko-gua ba-ang-et-e

People those FOC-PTL 1PL-like-PERF-FV INF-exceed 1PL-dislike ama-rwa

PL-beer.

‘Those people like more than they dislike beer’

(☖$_{CE}$= amarwa)

5.2 The Formation of Comparative Supelative Constructions

The superlative construction is generated by the process of superlative deletion and Superlative Ellipsis in the performance interfaces. The process of superlative deletion involves the deletion of the degree adjective in the superlative clause due to conjunction deletion, whereas the Superlative ellipsis involves the reduction of the clause by deletion of the non-degree marked elements. Both or one of the processes can act on a superlative clause to derive a gapped construction. The process is obligatory, since it is driven by the economy principle of ‘least effort’ and to avoid redundancy. In section 3.2.1 we will consider the cases in which superlative deletion occurs and in 3.2.2 the focus will be on superlative ellipsis.

5.2.1 Comperlative Superlative Deletion

The superlatve clause in EkeGusii consists of two degree Phrases, one which is a complement or that serves as the argument of the main verb in the main clause, and the second one which takes absolute indefinite Quantifier Phrase and/or Determiner phrases as in (21) below or Polarity items as arguments to express superlative denotations as in (21) below..

(21)a. *Monari nigo are omotambe kogua kera omonto*

Monari n-igo a-r-e omo-tambe ko-gua kera

Monari FOC-PTL 1SG-is-FV 1SG-tall INF-exceed every

omo-nto ☖$_{CD}$.

1SG-person

"Monari is the tallest (than every person)"

(☖$_{CD}$ =d-are omotambe)

b. [$_{IP}$ Monari [$_{I'}$ [$_{FocP}$ nigo [$_{v'P}$ are [$_{DegP}$ [$_{AP}$ omotambe [$_{Deg'}$ [$_{Deg}$ Deg^{0} $_{[+superlative]}$[$_{CP}$ [v'P kogua [DegP [Deg [$_{QP}$ [$_{Q}$ kera [$_{DP}$ omonto]]]]]]]]]]]]]]]

The idea of the comparative/Superlative marker being the same licensor of degree deletion in the Ekegusii language opens up the question whether what is considered as comparative deletion should be construed as a universal category.

(22.) Comparative Superlative Deletion

a.) *Moraa nigo are omonene kobua* ☖$_{SE}$ *kera omonto* ☖$_{SE}$ ☖$_{SD}$(ATB & Gapping)

Moraa n-igo a-re ono-nene ko-bu-a

Moraa Foc-PTL 1SG-like-PERF-FV PL-porridge INF-exceed kera omo-nto

every person.

'Moraa likes porridge more than everything'

(☖$_{SD}$= Moraa ☖$_{SE}$= aanchete)

b.) *Moraa nigo are omonene kobua* ☖$_{SE}$ *onde bwensi* ☖$_{SD}$(ATB)

Moraa n-igo a-re ono-nene ko-bu-a

Moraa Foc-PTL 1SG-like-PERF-FV PL-porridge INF-exceed onde bwensi

any all.

'Moraa likes porridge more than everytone'

(☖$_{SD}$= Moraa ☖$_{SE}$= aanchete)

5.2.2 Comparative Superlative Ellipsis

The process of superlative ellipsis targets elements in the superlatives other than the degree construction, but it can also work alongside comparative ellipsis. Consider the the sentences in (23) below.

(23) Supelative Ellipsis.

a. *Moraa nigo aanchete obokima kobua* ☖$_{SE}$ *kera egento* (ATB & Gapping)

Moraa n-igo aa-nch-et-e obo-kima ko-bu-a

Moraa Foc-PTL 1SG-like-PERF-FV 14PL-porridge INF-exceed

Kera egento

every thing.

'Moraa likes porridge more than everything'

(☖$_{SD}$= Moraa ☖$_{SE}$= aanchete)

d) *Moraa nigo aanchete obokima kobua* ☖$_{SE}$ *kende gionsi* (ATB/ Gapping)

Moraa n-igo aa-nch-et-e obo-kima ko-bu-a

Moraa Foc-PTL 1SG-like-PERF-FV 14PL-porridge INF-exceed

Kende gionsi

Any all.

'Moraa likes porridge more than anything'

(☖$_{SE}$= Moraa ☖$_{SE}$= aanchete)

5.3 Structural Ambiguity

In this section we will examine whether the standard Phrase in comparatve and superlative clauses in Ekegusii exhibit structural ambiguity as posited by Moltmann (1992) in relation to comparatives. Moltmann assumes that comparatives may have two syntactic structures simultaneously, that is, coordinate structure and subordinate structure.

The argument posited by Moltmann is a reaction to the idea that comparative clauses are basically related to coordination which is still followed by researchers (cf. Lechner 2001, 2004; Hankamer, 1973; Napoli, 1983 to mention a few). In some analyses, the two accounts are assumed to be distict, with some researchers considering the comparative as having subordinate structure only as posited in Bresnan (1973).

The aspect of comparatives having a coordinate structure is shared by superlatives in EkeGusii. Section 3.3.1 below deals with the coordinate character of comparatives, whereas section 3.3.2 is on the coordinate structure of superlative constructions.

5.3.1 Coordinate Structure in Comparative Constructions

Napoli (1983) demonstrates that the comparative construction involves coordinate reduction by adducing environments in which one can substitute the conjuncts with the comparative *than* without loss in meaning. The test works for cases of Comparative Ellipsis in EkeGusii in relation to the universal coordinators, *na* 'and' and *gose* 'or', but not for *korende* 'but' being intersubstitutable with kobua 'exceed' as shown in (24) below

(24) (i) a. *Ombese naanchete echae na* $\triangle_{CE}\triangle_{CE}$ *e-rongori*

Ombese na-anch-et-e e-chae na
Ombese FOC-like-PERF-FV 9PL-tea and

e-rongori

9PL-gruel

'Ombese likes tea and gruel'

b. *Ombese naanchete echae kobua* $\triangle_{CE}\triangle_{CE}$ *erongori*

Ombese na-anch-et-e e-chae ko-bua

Ombese FOC-like-PERF-FV 9PL-tea INF-exceed e-rongori

9PL-gruel

'Ombese likes tea than gruel'

(ii)a. *Nyanchera n' omorabu gose* $\Delta_{CE}\Delta_{CE}$ *omomwamu.*

Nyanchera n' omo-rabu gose omo-mwamu

Nyanchera is 1SG-light or 1SG-dark

'Nyanchera is brown or black'

b. *Nyanchera n' omorabu kobua* $\Delta_{CE}\Delta_{CE}$ *omomwamu.*

Nyanchera n' omo-rabu ko-bua omo-mwamu

Nyanchera is 1SG-light INF-exceed 1SG-dark

'Nyanchera is brown than black'

(iii) a. *Nyanchera naanchete echae korende taancheti erongori*

Nyanchera na-anch-et-e e-chae korende

Nyanchera FOC-like-PERF-FV 9PL-tea but ta-anch-et-i e-rongori

NEG-like-PERF=FV 3SG-gruel

'Nyanchera likes tea but dislikes gruel'

b. *Nyanchera naanchete echae kobua taancheti erongori

Nyanchera na-anch-et-e e-chae ko-bua

Nyanchera FOC-like-PERF-FV 9PL-tea INF-exceed

ta-anch-et-i e-rongori

NEG-like-PERF=FV 3SG-gruel

Nyanchera likes tea than dislikes gruel '

In the examples given in (24) above, the sentences in (i) and (ii) the conjunct is intersubstitutable with the comparative marker k*ogua* 'exceed'. However, the contrastive conjunct does not license reduction and its substitution with the marker renders the sentence semantically ill. The conjunct introduced by the conjuct introduces new information and so the comparative is not isomorphic hence blocking the reduction process.

Lechner (2004:6) posits the notion that comparative ellipsis is a kind of coordinate ellipsis that is subject to coordinate reduction processes such as *Gapping*, *Right Node Raising* or *Across-the - Board (ATB)* movement that involve the process of conjunct reduction. The assumption can be supported by the EkeGusii data which targets only part of the matter in the verbal as is sometimes the case in gapping constructions. The aspect, Conjunct Reduction (CR), is assumed by Lechner to be the preserve of coordinate ellipsis, and the similarity of form exhibited by Comparative Ellipsis construction is an indication that the construction involves a coordination process at some point of its derivation. She formalizes the idea by positing what is reffered as the Conjunct Reduction Hypothesis given in (25) below.

(25) The CR-Hypothesis (Lechner 2001: 689)

CR operations can target comparatives

In this paper we argue that it is the case that phrasal comparatives attested exhibit the same characteristics as that of the Gapping cases in EkeGusii hence they are subject to the CR-hypothesis. The cases that involve Gapping are characterized by aspects such as isomorphism, boundedness and Locality.

In the context of coordinate ellipsis, the elements in the ellipsis site can be isomorphic and bound to the antecedent in the root clauses. The gap creaated by deletion obeys the constraint of locality in that it is controlled within its domain (we will not consider the effects of long distance in this paper, that will be matter for a paper examining the issue of syntactic islands in degree constructions).

Consider the case of Gapping in (26) below.

(26) a. *Monari nigo are omonene na Obese boigo ⊿.*

Monari n-igo a-re omo-nene na Ombese boigo

Monari FOC-PTL 1SG-is 1SG-big and Ombese too

'Monari is big and Obese too'

(⊿=nigo are omonene)

b. Monari [nigo are omonene]

na Obese boigo [~~nigo are omonene~~]

In the comparative ellipsis site in the EkeGusii sentence given in (27) below is symetrical to the correlate in the root clause, if it is assumed that the sentences are generated in the second syntax, the further syntactic computation that occurs after the subordinating element, *Kogua* 'exceed' is introduced . The process used to generate the comparative deletion is similar to that of the coordinate ellipsis construction in (26) above.

(27) a**.** *Monari nigo are omonene kogua Ombese* ☖$_{CE}$☖$_{CE}$☖$_{CD}$**.**

Monari n-igo a-re omo-nene ko-gu-a Ombese

Monari Foc-PTL 1SG-is 1SG-big INF-surpass-FV Ombese

'Monari is bigger than Ombese**'**

(☖$_{CE}$=nigo ☖$_{CE}$**=** are ☖$_{CD}$= d-omonene**)**

b. **Syntax**

(i.) *Monari nigo are omonene kogua Ombese* ~~nigo~~ ~~are~~ ~~d-omonene~~

$[_{IP}$ $[_{Dp}$Monari $[_{FocP}$ nigo $[_{I'}$ $[_{v'p}$ $[_{Cop}$ are $[_{DegP}[_{AP}$ omonene $[_{CP}$ $[_{v'P}$ kogua $[_{IP}$ $[_{DP}$ ombese $[_{FocP}$ nigo $[_{I'}$ $[_{I}$ $[_{v'P}$ are $[_{DegP}$ $[_{AP}$ d-omonene]]]]]]]]]]]]]]]]

(ii.) *Monari nigo are omonene kogua Ombese* ~~are~~ ~~d-omonene~~

$[_{IP}$ $[_{Dp}$Monari $[_{I'}$ $[_{FocP}$ nigo $[_{v'p}$ $[_{Cop}$ are $[_{DegP}$ $[_{AP}$ omonene $[_{CP}[_{v'P}$ kogua $[_{IP}[_{DP}$ ombese $[_{I'}$ $[_{I}[_{v'P}$ are $[_{DegP}$ $[_{AP}$ d-omonene]]]]]]]]]]]]]]]

The sentences in (27) involve sentences that are of equal syntactic weigthing, in that the meaning of the comparative clause is not subordinated to that of the root clause. The sentence in (27bii) above exhibits the behavior of a form of phrasal ellipsis by virtue of deleting a clause that is isomorphic to a constituent, that is the entire VP (or I'). The introduction of the comparative *Kogua* 'than' in the sentence involves a process that can be seen to be analogous to that of coordination. The construction may be considered to involve the process of comparative gapping which is not distinct from the Gapping process in Coordinate Ellipsis in EkeGusii.

3.3.2 Coordinate Ellipsis in Superlative Clauses

The subordinator *kogua* 'exceed' in superlative clauses behaves the same way it does in the comparative in so far as structural ambiguity is concerned. The patterns of coordination observed in comparatives above are replicated to some extent, but the semantic range of superlatives is

limited by the semantic attributes of the types of quantifiers it realizes in the superlative clause. Consider the sentences given in (28) below.

The standard marker Kobua ‘exceed’ can be substituted with the coordinator na as illustrated in the sentences given in (28) below

(28) (i) a. *Ombese naanchete echae na* △SE△SE *kende gionsi.*

Ombese na-anch-et-e e-chae na kende

Ombese FOC-like-PERF-FV 9PL-tea and any

gionsi

All

‘Ombese likes tea and everything’

b. *Ombese naanchete echae kobua* △SE△SE *kende giosi*.

Ombese na-anch-et-e e-chae ko-bua kende

Ombese FOC-like-PERF-FV 9PL-tea INF-exceed any

Giosi

all

‘Ombese likes tea than everything’

(29) (ii) a. *Ombese naanchete echae na* △SE△SE *kera egento*.

Ombese na-anch-et-e e-chae na kera

Ombese FOC-like-PERF-FV 9PL-tea and every

ege-nto

thing

‘Ombese likes tea and everything’

b. *Ombese naanchete echae kobua* △SE△SE *kera egento*.

Ombese na-anch-et-e e-chae ko-bua kera

Ombese FOC-like-PERF-FV 9PL-tea INF-exceed every ege-nto

thing

'Ombese likes tea than everything'

Superlatives are syntactically subject to Conjunct Reduction (CR), and so we can extend Lecher's CR-hypothesis as follows in (30) below.

(30) **CR-Hypothesis**

CR can target comparatives and Superlatives

In the sentences given in (30) below, conjunct reduced constructions such as Gapping, ATB and RNR are attested in superlative clauses. The sentence are derived by the stated processes of conjunct reduction as hypothesized in (30) above.

(31) a. *Nyaboke n'omomwamu mono na onde bwensi* $\triangle_{SE}\triangle_{SD}$ (Gapping and Superlative Ellipsis)

Nyaboke n' omo-mwamu mono ko-bua o-nde bwe-nsi

Nyaboke is 1Sg-black more INF-exceed 1-any 1-all

'Nyaboke is darker than everyone '

($\triangle_{SE}$= no $\triangle_{SD}$=d-omomwamu)

b. Nyaboke n'omomwamu mono kobua onde bwensi $\triangle_{SE}\triangle_{SD}$ (ATB)
Nyaboke n' omo-mwamu mono ko-bua o-nde

nyaboke IS 1-black more INF-exceed 1-any

bwe-nsi

1-all

'Ombese likes tea than everyo'

($\triangle_{SE}$= no $\triangle_{SD}$=d-omomwamu)

c. Nyaboke nigo are omomwamu mono kobua onde bwensi are$\triangle_{SD}$

Nyaboke n-igo a-r-e omo-mwamu mono

nyaboke **FOC-PTL** **1SG-is-FV** **1-black** **more**

ko-bua o-nde bwe-nsi a-re

INF-exceed **1-any** **1-all** **1PL-is-FV**

'Ombese likes tea than everything'

(Δ_{SE}= no Δ_{SD}=d-omomwamu)

6.0 Conclusion

In this paper we have analysed the comparative and superlative clauses as projecting the same structual form with the difference being decided in the Logical form (or the Conceptual-Intentional (C-I) interface) rather than from the phonetic form (or Articulatory-Perceptual (A-P) interface). In accounting on how the structual ambiguity, between coordination and subordination, we argue for the position that the constructions have a coordination syntax that is attested by the constructions realizing constructions such as Gapping, RNR and ATB which are subject to the conjuct reduction constraint. The results reported here will help to extend the typological considerations on degree constructions in Bantu languages.

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Intercultural bridges in literature

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A B S T R A C T

This paper's aim is to underline the cultural knowledge and effects produced by a translated literary work. Literature needs to be translated in order to take part in international knowledge. That is why this paper focuses on the intercultural change between two different audiences, the translator being seen as a mediator between two communities.

Translated literature helps new generations to travel mentally, imagining their ancestors' way of life. Ancient civilizations will never be forgotten as long as there is literature to spread their values and keep them alive.

Temporal and spatial barriers can be removed due to translation. A culture enlightens a literary system and translators are the messengers responsible for the authenticity of created knowledge.

What role do translators have in the cultural transfer? Is literature able to support and improve intercultural tolerance, understanding and knowledge? These research questions together with other controversial issues will find their answers in this work. The variety of examples will come up with unexpected solutions, analyzing the connection between literature, culture, translator and reader.

0. Introduction

The reason why we have chosen to analyze the cultural transfer in written literature is that we strongly believe that most of the novels we read have a cultural dimension. Even if nowadays best sellers are mainly concerned with fantastic stories and science fiction views, literature is the best tool that helps us keep alive important historical events and cultural behaviors. If we think about the great classics, we easily notice that they used their own traditions and customs as a valuable support in their successful novels. They described picturesque passages from their own regions, along with manners, traditions, customs, and types of food, clothing, beliefs, values and behaviors. Furthermore, books convey the pleasure of entering a new world and discovering rich facts about a nation. Another reason that made us analyze this subject deeper is that we consider literary translation an art made by an artist with linguistic and cultural abilities. Only excellent linguistic skills are not enough for the literary field. An artistic literary translation needs to convey a cultural flavor that is able to cross physical and temporal boarders, surviving despite time passage.

The first section highlights the relationship between translated literature and culture, presenting theories and debates that can improve this connection, so that the important values can be preserved. The main topic of discussion is the relevance of literary translation in our society. It is shown how strong the cultural impact can be in shaping mentalities. Remarks by

famous writers and researchers are analyzed with emphasis on the role of literature. The examples presented show that literary translation is able to create intercultural tolerance understanding and friendship, or to increase cultural distance, by building stereotypes and prejudices.

Strategies and methods used to translate culture are presented in terms of efficacy. Examples from the international translated literature are given in order to underline their effects. Domestication and foreignization are two key methods analyzed, whose importance is crucial in cultural transfer.

The last section shows why a translator is often compared with an ambassador or a missionary. They build cultural relations, turning literary translation into a high form of art. A culture should not be considered inferior or superior to another; they have just evolved differently. Due to their evolution, different beliefs and values about reality were created. Such beliefs and values get past boarders and spread across the world with the aid of a well translated literary work.

1. Intercultural understanding of literary translation

A country's history is not reflected only in the political conflicts, economy and monuments. History comprises much more interdependent fields, which together define and promote a culture. One of them, which will be analyzed in this paper, is represented by literature. We cannot talk about literature if we do not take into consideration the art of translating.

Translation studies started to develop in the 80's, 90's, and had an uncertain status at the beginning. Progressing in this scholarly field, many papers, books and essays were published. This area of research evolved rapidly due to the increased scholarly interest. Susan Bassnett even suggested that it turned into a "dependent discipline" (qtd. in Lefevere 5). Anthony Pyms agrees with Bassnett regarding this matter, claiming that translation as a separate field collaborates with other domains (qtd. In Lefevere 8). Translations studies are not concerned only with literature. There are other domains involved, such as: anthropology, linguistics, history, etc.

The scholars who first started to write about this field were Susan Bassnett and Andre Lefevere in 1990. Their main concerns were related to context and not to meaning). Literary translation started being regarded from a cultural and ethical point of view. In this sense, Edwin Gentzler's opinion is very representative. He believes that there are two relevant changes in this area. One refers to the attention focused on target culture rather than the source culture (qtd. in Bassnett 13). The second major change that Edwin Gentzler considers relevant is that translations training was modernized and enriched with cultural elements (qtd. in Bassnett 13).

Recently, people have realized the importance of intercultural communication. Such courses are taught in Europe, North America, China and Australia. A young translator should be taught that there are no superior or inferior cultures. They should learn to respect every culture's values, attitudes or behaviors. After foreseeing the increased interest in this field, scholars started to explore their own cultural heritage and history (Bassnett 12). The role of translation in literature has not developed now, nor did it in the last century. This role has existed since Greek and Latin people offered to the world an important cultural heritage. The literary translations of ancient

civilizations help today's culture to get information about their ancestors and to have an increased knowledge about world development.

In his book entitled "T*ranslation/History/Culture, a Sourcebook*", Andre Lefevere sums up many relevant opinions of influential writers over the centuries. The literature written and published all over the world deserves to be translated. It makes foreign cultures more aware of the important achievements of writers; it enhances perspectives on foreign cultures (Lefevere 106). According to Zohar, readers' views can only evolve, if every nation has translated literature: „the need of literary translation increases as the literature system develops" (qtd. in Bassnett 14).

Due to its power of conveying message, translation should have a greater importance. It can use many techniques to influence the readers of a foreign culture in terms of attitudes. But not only foreign cultures can be influenced. Norman Shapiro sees the process of translation as a clear mirror. The target reader should not notice any imperfections (qtd. in Venuti 1)

In his book entitled *"The Translator's Invisibility*", Laurence Venuti, also called a modern time rethinker of translation, states that a text should seem very natural to the foreign culture. Only by naturalness, can a text show its transparency (4).

The process of translation is like a strong connection between the source and the foreign culture (Bassnett 16). The strength and durability of this relationship is tightly connected to the translators' talent and dedication. Venutti claims that translation is a cultural action „Translation cannot be judged on 1 to 1 correspondence" (18). Rather, this art is more related to adaptation (. Only if it is adapted can a translated text have manipulative power. Otherwise, foreign readers will not improve their cultural knowledge, because the other cultural values are too different from their own. In case the source community is very different from the target culture, the readers need cultural explanations. In this way they will get to accept the foreign translated culture as able to enrich their literary system. So, it can be said that a translation can manipulate only if it has an influencing power, if it is legitimate and authorized. In short, the three nouns: legitimacy, influence and power, best describe the effects produced by a good translation (Lefevere 8).

Goethe once said: "If you want to influence the masses, a simple translation is always best." (qtd. In Lefevere 12). This is the real intention when a text is translated: to influence in a positive way the evolution of a culture. A well done literary translation can shape the mentalities of a community, because it promotes intercultural communication and friendship. Moreover, it will make us more aware of other cultural practices and will enrich every nation's literature. On the other hand, Victor Hugo believes that a translation can create a cultural distance between the source and the target culture. The target culture will be shocked to discover other moral standards that cannot reach their understanding (qtd. in Lefevere 19). A confrontation between two different systems of values should be avoided and intercultural tolerance should be favored.

Anne Louise Germaine de Staël explains in a simple but persuasive way why all literary works have to be translated. According to her, translated literature increases the knowledge and broadens the horizons of a nation. Without translation, it would be impossible to acquire such knowledge, because that would mean to perfectly know all the languages in which great works have been produced. (qtd. in Lefevere 21)

There are cultures situated to a very far distance one from another. So, intercultural exchange cannot be easily achieved. Sometimes, even close cultures do not have much information about their neighboring communities. When distance is involved, the differences are even bigger; therefore accomplishing intercultural understanding is a greater challenge (Bondesson). These

stereotypes and prejudices can be adjusted by translated literature. That is why it is believed that translation is an art. It can create positive images and enhance knowledge and tolerance. That is why, the translated literature should be regarded as a powerful art. It is difficult to accomplish an intercultural exchange due to stereotypes created by the society for many centuries. It is not impossible to create an intercultural image. However, promoting the attractive elements that define a community can be an effective solution. Every author belongs to a cultural background; that is why literary works describe a cultural reality using fictional characters. Translating cultural features is a good way to integrate a culture's values in the international knowledge. The wrong misconceptions will be destroyed and new cultural partnerships will develop.

2. Domestication and foreignization

Translation studies represent a field of interest for scholars and translators. Because this area of research was regarded with enthusiasm, some theories were developed and some debates took place. These approaches were mainly concerned with the ability of translated literature to convey cultural messages. Translating a literary text is a cultural action that involves much knowledge and responsibility. The translation has to be accurate, so the target reader needs to understand the text exactly as the source reader does. In Schleiermacher's opinion there are two ways of translating a literary text: domestication and foreignization: "Either the translator leaves the author in peace, as much as possible, and moves the reader towards him; or he leaves the reader in peace, as much as possible, and moves the author towards him". (qtd. in Venuti 18)

Domestication can be achieved if the translator translates and adapts the foreign culture to the source culture's values and standards. All the things that might seem strange to the readers are translated using their own cultural knowledge. In this way the author comes closer to the reader's cultural needs and expectations (Ning). While Foreignization is the method that requires the readers to leave their cultural habits entering a new world and exploring a new culture. Accomplishing foreignization, the translator needs to bring the reader near the author, introducing him to the foreign culture. The foreign style of the literary text is kept and promoted in the translation for the target reader.

Debates took place concerning this matter, the scholars trying to see which strategy creates a better intercultural communication and understanding. Eugene Nida is in favor of domestication, arguing that only by domesticating a translation a text can become fluent for the target reader (qtd. in Venuti 19). Laurence Venuti, on the other hand argues in favor of foreignization. He regards these two terms as an intercultural journey. About domestication, Venuti claims that all the foreign elements unknown to the readership are transfigured in the readers' culture, becoming more familiar to them, so easier to understand. In his opinion, domesticating a text is a limited way of intercultural communication. When the text is domesticated, all the foreign elements are lost and the translation is rendered only from a linguistic point of view and not from a cultural perspective. In order to achieve intercultural communication, foreignization must be used to introduce and explain foreign views to the target reader, so that the intercultural change can take place.

When the translator considers that the foreign elements are unknown to the reader, and cannot find a solution to integrate them into the target culture, they try to domesticate the translation. If the translator considers that the foreign element represents a fascinating fact, a

curiosity for the target culture, they use foreignization. The foreignization strategy does not only create intercultural change, it introduces in the target culture, new idioms, words or ways of thinking.

These two important strategies can take place at a syntactical and textual level. In case of domestication, all the expressions from the source culture are translated using a paraphrase or a close equivalent from the target culture. Using foreignization, the expressions are translated literary and are explained in paratext. There are elements which belong only to a culture like: objects or habits. Domesticating these elements means to translate them with the closest resemblance .If the elements are foreignized, their meaning should be explained using notes or commentaries within the text, in order to produce an impact upon the reader (Schmidt). However, using these methods excessively, the translator can break the relationship between the literary text and the readers. For example, in case of using too much domestication, a big cultural luggage from the cultural transfer risks not to get to the readers, so they will not learn anything new about the foreign literature. Their cultural understanding will remain limited. A literary text that is too domesticated does not bring anything new to the source culture, losing all the new views that the foreign culture had to offer (Ning). It can be interpreted that too much domestication creates an obstacle between source and target culture .

On the other hand, too much foreignization is not a solution either. Even if it represents a more original method of translation and it favors more the intercultural change, the reader risks to understand wrong the text. The reading will be fastidious and the new culture will not get into the reader's mind. According to Schleiermacher these two concepts are in a total contradiction. He believes that, mixing them is not the right solution. Before starting translating a literary text the translators should take an important decision: to domesticate or to foreignize the text. They cannot use both strategies, because the result will not lead to the understanding of the text (qtd. in Schmidt).

A translated literary text should be fluent. The fluency can be achieved only if the translator keeps a balance between domestication and foreignization. This balance will make readers to look at a foreign culture from a new perspective in a pleasant manner. So, a cultural adaptation is indicated until a certain extent because for every culture the reality and understanding are different. It mainly depends on the target culture. If the target's cultures values are closed to the source culture's ones, the literary text does not require much cultural adaptation. If the two communities are distinct, the adaptation is necessary. Excepts for cultural adaptation, new cultural ideas and concepts have to be included in the translation. Otherwise the readers will not look at the text from a cultural perspective.

3. Examples from the international Literature

A translated work is compared with the heart of the body. The translator is compared with a physician. When the physician operates the heart, he seriously takes into account the surroundings (qtd. in Xiaoqian). When the translator translates a novel the cultural factors should be included.

The translation of Gone with the wind, made by Fu Donghua'scould be integrated into Chinese culture, because the translator analyzed deeply the cultural matters. Chinese readers are not used with long psychological descriptions, so the novel was culturally adapted. Some of the

long descriptions were not included in the Chinese version (Xiaoqian). The novel became in this way accessible to the Chinese readers and the translation was not a failure.

The cultural factors are indeed attractive and the translation should be able to represent them. The readership is interested in learning new cultural issues about a community. On one hand, there are Indian writers that write in English, on the other hand there are famous Indian writers that are translated into English. British people rather read not so famous Indian authors that write in their own language, than very famous writers translated in English (Lefevere 20). Maybe they feel closer to the Indian culture by reading original works.

For western audiences, oriental cultures represent a fascinating, new world. Sometimes, this attractive world is created by translators' imagination. A good example can be considered the image created by translators of Chinese literature. This creation managed to turn China into a poetical nation (Lefevere 22). The biggest difficulty in contemporary literary translation is that the new wave of writers is totally different from the mythical image built by translators (Lefevere 22). The western readership expects to encounter in the contemporary novels the mythical characteristics. The cultural factors created by translators are not suitable for the modernity that today's writers try to promote. The western readership still longs to read about that different poetical China. That is why the today literary Chinese translations are not so successful in Europe. Nowadays, the scholars got to the conclusion that the translator's demands cross linguistic barriers. We can deduce that the translation goes beyond language and grammar.

Up to now, we talked about intercultural transfer as a way of conveying habits, ways of clothing, customs, so that present and future generations are able to create an image about the epoch in which a certain work has been written. However, intercultural translation goes beyond describing certain manners specific for a community. The name of a character or invented words meaningful for a fantastic world are not chosen simply out of pure creativity. An imaginative meaning is sometimes hidden behind the main sense. For example the word "muggle" made popular by J. K. Rowling in Harry Potter series goes beyond the intended meaning in the novels, people who have supernatural powers.

Of course, being not such a popular word, even if its existence with different meanings could be traced back centuries before Wroling made it famous, it was a real challenge for all the translators. On a hand, through their translation they had to convey the obvious meaning of the word that is people with magical powers and on the other hand, their equivalent in the target language should have been able to keep the hidden meaning, someone who sometimes behaves foolishly. Cambridge dictionary defines "muggle" as J. K. Rowling wished to be perceived, meaning people with miraculous skills. Besides that, to the same word corresponds another definition which says that someone who lacks the ability to sew or nit can be called a "muggle". Oxford dictionary generalizes the inability communicated by the same word defining it as a lack of experience in any area of activity. Rowling herself declared that the idea of the word "muggle" is related with the term "mug" which describes a stupid person that can be tricked effortlessly.

Pierre Michonneau astonishes his readers with curiosities about strategies behind some translation decisions in his article: "19 surprising facts about the French translation of Harry Potter" published on buzzfeed.com. Ménard, the Harry Potter's French translator explains the thinking behind the French equivalent "moldu". According to him, the word has be chosen because somehow it resembles the original term. But there is far more creativity behind that choice. The translator admits that the starting point was the expression "mou du bulbe", which is

a synonym of mug. Because the phrase would have been too long and unpractical to replace a single word, he came up with the equivalent: "muggle".. In this example, we can notice that nothing has been left to chance. A word of an English origin has been adapted and produces the same effect on the French readership, who probably was shocked to discover that "moldu" does not make any sense for an English reader.

The same strategy was applied for the Italian equivalent, but in that case, the translator had somehow an easier task because there was no need to combine letters from an old expression and create a totally new one. The word "babbano" is used in Tuscany to talk about someone who is unintelligent. In standard Italian the equivalent would be "babbeo". It is true that "babbano" does not resemble "muggle" at all, but it keeps the meaning that the author intended. Translation is not a simple act of transferring a word from one language to another. As we noticed in this two examples, the translator has to research the etymology of the original term. Also, the knowledge extends beyond the standard language. Sometimes the translator needs to consider the usage of certain expressions in different regions of the country. Imagine how weird would have been for Italian or French readers to read these novels without any adaptation of certain words or names. The translators took into consideration the cultural impact of the books and instead of leaving the names and invented words as they were originally, they took the liberty to adjust them, to make them part of the language. The same thought preoccupied the Romanian translators as well who rendered "muggle" into Romanian as "încuiat" which means a narrow minded person. And it makes sense! If we read the books, we can certainly observe that some "muggles" were really limited. Not the same thing can be said about Spanish translations, where the English names and words have been left as they are without any intervention from the translator. Of course this did not diminish the success of the novel in Spain or Latin American countries, but cultural and linguistic adaptations make the process of reading more enjoyable. Without these genial adaptations, Spanish editions seem to have a low variety in vocabulary. Of course that makes the first volumes perfectly appropriate for an intermediate Spanish learner, but in terms of character names, the Spanish readership at least won't be confused when hearing the English counterparts. There were regional adaptations in the Spanish books though from other points of view. For example the pronouns "ustedes"" and "vosotros" can be found depending whether we prefer to read the Latin american or the Spanish version. These alternatives are chosen in terms of the target readership. The regional adaptations in Spanish had as main objective to feat in a particular cultural setting. Perhaps, the Spanish did not consider the names of the characters or words like "muggle" will add a cultural value to their work as did the French Italian and Romanian translators. Even between the 3 Latin similar cultures above mentioned, there are big variations. The name of the school Hogwarts was left the same in Romanian and Italian but translated as "Poudlard" in French. The name of the headmaster is Dumbledore all over the place except for Italians, where he is known as Silente. These are decisions taken by the translators who make up their mind how far they can go in their adaptation of a certain literary work having in mind their source language and culture. J. K. Rowling wrote about an imaginary world that was brought closer to the foreign readers with the help of translators, contributors to the success of the novels worldwide.

Now back to the classics where intercultural transfer is still problematic! When it comes to Tolstoi or Dostoievski, barriers imposed by the language and culture seem impossible to cross, due to the long psychological and philosophical passages and features that at first sight seem specific only for the Russian community. Despite the cultural and linguistic obstacles, these two authors became representative for the international literature with the help of translators that used

their knowledge in order to render accessible this huge literary heritage to past and future generations. Rosamund Bartlett published a new translation of Anna Karenina. In this context, in her article: “Anna Karenina – the Devil in the Details” published by The Guardian, she makes some important observations which underlines one more time that language and culture go hand in hand. She expresses her opinion that back at that time translators sometimes failed to remain faithful in their translations to Tolstoi’s work, because the public was not ready yet for the major shift in literature, being used with the language and style of Jane Austin or Charles Dickens. That is the reason why the translators chose to modify the text and make it look like the public expected to. She further supports her point of view bringing into discussion the argument of Dmitry Mirsky who makes a difference between Tolstoi’s contemporary writers, who used a more formal language to describe even the most colloquial discussions and the author himself, who strived to write in the language of the people spoken in day to day life. She ends her article with the following lines: “Translators will keep ascending the towering peaks of world literature, just as there will continue to be assaults on Everest”.

This way of judging translations resembles Donald Rayfield’s oppinion expressed in his book review of: “Who knows he dunit” which believes that: “Arguably, each generation needs a new and better translation; American and British readers may require separate ones.” Different translations into English of Tolstoy’s work are deeply studied. . Rayfield gets to the conclusion that Constance Garnett’s translation published in 1912, the first attempt to render Tolstoi accessible for an English readership is still valid. However, Richard Pevear and Larisa Volokhonsky’s version, a much newer translation is considered to be the most valuable, because the two translators keep a fair balance between what the original language conveys and the act of rendering the message accessible. We could argue that the newer translators are able to take more creative decisions in terms of cultural adjustments, due to the fact that the public nowadays is more able to embrace and appreciate Tolstoi’s style.

Another example that we would briefly like to talk about is the translation of Jane Austin’s novels in French and into Romanian. In this case, we deal with the cultural transfer in terms of politeness. For an English translator “tu” or “vous” in French would always be you in English. But the other way around the choice is not so obvious. In “Pride and Prejudice” or “Emma”, the dialogues between father and daughter, husband and wife and family friends are translated in French using the pronoun “vous”, as a mince of respect. In Romanian however, the same dialogs are rendered using the second person singular.

Even in Romanian, a language more indulgent from the point of view of politeness compared with French some concrete differences are made. For instance, the dialog between Emma and MR Knightley is translated on a friendlier note and they speak to one another using “tu”, meaning the second person singular. MR darcy and Elisabeth Bennet always use “dumneavoastră”, the polite form, in the Romanian version even after he asks her to marry him. We imagine that the Romanian translators made such a choice because the relation between Emma and George Knightley is much closer in the novel, he being a close family friend and a mentor for her. While, Elisabeth and Darcy are strangers at the beginning of the novel and their relation develops gradually. For a Romanian readership using the second person plural between parents and children or close friends would sound artificially. But in French if the dialogs between family members at least in the classical novels are not translated using “vous”, the books will not belong properly to “clasique” era..

David Bellows explains in an extract of his book: “Is That a Fish in Your Ear: Translation and the Meaning of Everything”, published in The Guardian the choice behind the French translators thinking. He reminds the fact that Le Figaro firmly expressed the idea that if “vous” disappears from the speech, that would be a great disaster for the French language and culture. Moreover, during the renaissance, “vous” was imposed to express a position of superiority such as children VS parents.

These variety of examples proves that language equivalence is not the main objective of translation. Many other factors and strategies are shaped and reshaped such as: politeness, characters names, invented words, etc. The goal here is to keep the same message, tonality, humor and vibe for a target language and culture that the original author intended to communicate to her his own source culture using the native language.

4. A messenger between two cultures

It was emphasized so far in this paper the relationship between literature culture and translation. This connection cannot be accomplished without a well-organized human mind. The translated literature could not have positive effects on a target culture without a responsible and skilled literary translator.

The cultural awareness is increased due to the hard work of the literary translators. If a foreign literature gets to be red, famous and appreciated, this happens because skilled translators involve their linguistic and cultural knowledge. The activity of translation does not imply only the language. Cultural knowledge also plays a key role in intercultural interaction (Xiaoqian).

According to Nida, a literary translator should have detailed information about the target culture. Because nowadays, the cultural communication is more and more valued, Nida claims that it is much more important for a translator to know the culture than the language (qtd. in Ning). Steiner agrees with Nida, claiming that the translation of literature means more than grammatical matter. The cultural factors are emphasized more, because a good literary translation means that a certain understanding between the source and the target culture has been achieved. In order to reach such success, the information about the target cultures is not enough. The translators should also study and analyze their own cultural background (Ning). So, firstly the translators themselves should interact with both cultures appreciating their values and respecting their beliefs. After this careful analyze, they have to promote their understanding to the readers.

A literary translator can create or destroy impressions or images about a foreign culture. That is why it can be admitted that the translators are messengers between two communities (Venutti 1). They can increase or decrease the respect and understanding between them, mediating a better cultural communication. That is why, for better interactions, the translators’ work should matter more. In his book “The translator’s invisibility” Venutti argues that a translator is not appreciated and recognized like an author, having the tendency of becoming invisible (11). Venutti believes that in British or American society, an author coming from another culture is far more appreciated .In this case the literary translator’s work becomes underappreciated. Only if the foreign writer manages to produce a best seller, a literary translator can provide a good leaving (Venutti 11). But it should not be forgotten however, the continuous implication of

translators. It is due to them, if the novel is sold in millions of copies. So, it is recommended for translators to become invisible but not due to the cases of underestimation. The translator's invisibility could have another interpretation. If the translators create in the target reader's mind the illusion of reading the original literary text, their work becomes invisible, transparent but very valuable (Venutti 1).

Being in the situation of representing a text in a foreign culture a literary translator has to be able to take some decisions. Due to the different linguistic systems, a total equivalence cannot be achieved. In this case, the translator should look for the closest equivalent, or interpret the phrase using other words in order to produce a much closed meaning (Lefevere 11). In this situation, the cultural studies are relevant, because the meaning conveyed should create interaction, not cultural miscommunication (Ning).

According to Perrot d'Ablancourt, a translator should adapt the source culture, so that the foreign community can better understand the cultural background. He explains the way he works in order to render a cultural service:

> I do not always stick to the author's words, nor even to his thoughts. I keep the effect he wanted to produce in mind, and then I arrange the material after the fashion of our time. Different times do not just require different words, but also different thoughts, and ambassadors usually dress in the fashion of the country they are sent to, for fear of appearing ridiculous in the eyes of the people they try to please. (qtd. in Lefevere 12)

This association suggests that there is indeed a resemblance between a literary translator and an ambassador. Both need to get actively involved in the source culture, representing their own country abroad and solving cultural misunderstandings. In cases of very distinct communities, the cultural adaptation becomes a harder task. For example eastern and western countries are quite different. An eastern tradition may produce cultural misunderstanding scaring a western reader. If that misunderstood tradition is presented to a western reader and explained in terms of evolution, the reader gets to accept and respect it.

Concerning the problems of total equivalence and of conveying cultural habits, there are two different opinions. Some scholars believe that the translators should translate the author without interfering with personal interpretations and adaptations. This type of researchers believes that the role of translating is only linguistic, without cultural implications (Lefevere 20). Since the concept of cultural consummation is deeply analyzed, more and more scholars and translators believe they should interfere. This means that the literary translators are free to adapt and to replace idioms with their own cultural equivalent. However, these decisions should be motivated. The translators are obliged to work with the writer's material, shaping and reshaping the phrases until they obtain a satisfactory result. So, John Dryden believes that with finite resources it is impossible for a translator to create a translated work that could compete with the original. But however there are writers who achieved international success. Without literary translators, they would have remained famous but isolated in their own cultures.

Moreover, a translation is not a well done copy. It also represents an original creation. Andrei Lefevere writes in his book "Translation / History / Culture a Sourcebook" that it is wrong to compare a literary translation with a perfect imitation of a work of art:

> A translation is not a copy of a painting in which the copier is willing to follow the lines, the proportions, the shapes, the attitudes of the original he imitates. A translation is entirely different: a good translator does not work under such constraints. At most he is like a sculptor who tries to recreate the work of a painter, or like a painter who tries to recreate the work of a sculptor. (Lefevere 18)

This quotation underlines the fact that a literary translator is an artist. He conveys the same messages to different communities raising cultural awareness and increasing knowledge. the message has significance for every foreign culture. So, a text can cross the cultural boundaries and achieve internationalization due to an expert in cultural details. Literary translators do not translate only a culture's literature. They also transfer important cultural manners that will get to take part in the international knowledge.

5. Conclusion

As it was mentioned at the beginning, the main purpose of this paper was to underline the challenges encountered by translators when they translate cultural elements from one language into another. We chose to focus on cultural transfer, because we believe that literature is a rich field in cultural issues. The characteristics of a community can be conveyed to other audiences and generations, only if translators understand perfectly both the target and the source culture. In order to highlight the importance of cultural aspects, using examples and opinions of well-known writers, we decided to demonstrate that literary translation is a creative form of art.

We hope we managed to stress enough the idea that translation is indeed an art that can conceal facts in order to help communities to get closer. Other ideas emphasized here were that, due to great translations, an author can become more famous abroad than in his own country. Concerning the strategies presented in the second section, the concluding ideas are the following: A balance should be found between domestication and foreignization, otherwise the readers will not get to discover the beauty of the translated culture. The characteristics of a community are found in its literature and need to be translated. It is not enough for translators to know the target language. They need to have a rich cultural understanding in order to create reciprocal cultural knowledge. Otherwise, mythical images appear. A mythical culture created in the readers' minds is difficult to be changed because the audience will hardly accept a different type of literature. Another concept in this section reveals that literature is a starting point in discovering new things about a community. Every culture has the right to be promoted and translated in order to survive forever.

The ideas mentioned in the last section deal with the cultural mediator between communities. The translator has cultural and linguistic responsibilities. Research skills and creativity are two key points in the development of literary translation. The translator's flexible thinking has to adjust to the readers' needs.

The above mentioned aspects are supported by a large variety of examples, which show that translated literature can shape cultural images and mentalities or create mythical and

stereotypical beliefs. That is why, for better cultural knowledge, the information needs to be accurate and conveyed according to the readers' views of reality.

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Impact of Cases on Grammatical Voice: A Comparative Study between Bānglā and Tamil

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A B S T R A C T

The paper intends to broaden and lends clarity to the current understanding of Bānglā grammatical voice and voice systems. The purpose of the paper is to study the impact of case system on voices. In this paper, we examine the morphological and syntactic characteristics of the Bānglā Grammatical Voice in comparison with Tamil voice and showing their similarities and differences. It is just a preliminary description of an ongoing research in which we intend to study many more features likes verbs behaviors, valency, animacy etc.

1. Introduction

Bānglā grammatical voice or Bācya is manifested in systems in which alternations in the shapes of verbs signal alternations in the configurations of nominal statuses with which verbs are in particular relationships (Klaiman, 1991).

In Grammar, the Bācya or voice signals the relationship of some particular nominal to some verb. Voice is traditionally regarded as a parameter of morphological variation in the verb. Its status is comparable with other verbal categories like tense, aspect, and mood/modality.

On the other hand, Cases are traditionally described as 'a system of marking dependent nouns for the type of relationship they bear to their heads' (Blake, 1994). Case is an inflectional category. Typically Case marks the relationship of a noun to a verb at the clausal level or of a noun to a preposition, post position or another noun at the phrase level. We need to make a distinction between cases and the case markers or case form through which case are realized. A case marker is an affix and a case form is a complete word.

Here we introduce the voice system of two different languages; Bānglā and Tamil. Tamil is a Dravidian language of South India, unrelated to Indo-Aryan language Bānglā and both the languages have an indigenous tradition of grammatical description. Our research work is mainly intended to broaden and lend clarity to the current understanding of Bānglā grammatical voice and voice systems. The present work aims to clarify the idea of Bānglā voice in comparison with Tamil voice.

2. Background

The study of Bānglā grammatical voice and its functions is very closely related the conception of the traditional Sanskrit grammar. So we will first see the voices of Sanskrit.

2.1. Voices in Sanskrit

Bācya is derived from the Sanskrit verb 'Bac' ('to say'). 'Bācya' used in sense of 'that which is to be said' or 'that which is worth saying.' Bācya or Voice analysis is one of the most ancient topics in the tradition of in the tradition of descriptive grammatical description in Indo-European languages (IE).

In 'Asṭādhyāyi' (Eight-Chaptered) Pānini (ca 500 BC) described the distinctions of inflectional paradigms of meanings associated with the opposition of active (parasmaipada) and middle (ātmanepada) in the Sanskrit verb. Sanskrit Verb like Greek has only two voices Kartṛ Bācya or Active voice and Karma-Kartṛ Bācya or Madhya Bācya or Middle voice. In Kartṛ Bācya, the parasmaipada is an inflected verb the action of which is addressed to another than the agent and in Madhya Bācya, the ātmanepada is an inflected verb the action of which is addressed or reverts to the agent himself. For example, 'Ram cooks' is the one case he cooks for his master or others, the verb is then put in the Parasmaipada, 'rāma: pacati' but in another case he cooks for himself, the ātmanepada is employed and the sentence is 'rāma pacyate'.

Kartṛ Bācya and Madhya Bācya are assigned to a voice type called basic. They are contrasted with a second class of voice system termed derived passive voice. It is significant that both transitive as well as intransitive basic verbs passivize in Greek and Sanskrit. The passive of transitive is called Karma Bācya or Passive voice and the passive of intransitive verb called Bhāb Bācya or Intransitive Passive voice. The passive voice takes the termination of the ātmanepada and prefix –ya to them before those of the four conjugational tenses.

Consider the following examples:

1. devadattah katạm karoti **ACTIVE**
   devadatta.NOM mat.ACC make.3SG
   'Devadatta makes a mat.'

2. katọ devadattena kri-ya-te **PASSIVE**
   mat.NOM davadatta.INST make-PASS-3SG
   'A mat is made by Devadatta.'

3. sa śe-te **MIDDLE**
   he.NOM sleep-3SG

'He sleeps.'

4. tena śay-ya-te **INTRANSITIVE PASSIVE**
he.INST sleep-PASS-3SG
'(Literally) It is slept by him.'

2.2. Voices in Bangla

In the history of Bānglā Grammar, Suniti Kumar Chatterjee (1939), first try to describe the concept of voice. According to him, there are four type voice in Bānglā; Kartṛ Bācya (Active Voice), Karma Bācya (Passive Voice), Bhāb Bācya (Neuter Voice/Intransitive Voice/Impersonal Voice) and Karma-Kartṛ Bācya (Middle Voice/Quasi-Passive Voice). He defined and described these voices morphologically by following Sanskrit Voice System. But the characteristics of voices which he noted did not described Bangla voice system properly. Because Bānglā voice system have features which make it distinctive from the system of voice alternations in Sanskrit.

Manindra Kumar Ghosh (1952) redefined Bānglā Karma Bācya (Passive Voice) and Karma-Kartṛi Bācya (Middle Voice/Quasi-Passive Voice) and try to differentiate the voices in a proper way. He examines several examples from Bānglā and Sanskrit traditional grammar. According to him there are mainly two types of voices only: Kartṛ Bācya (Active Voice) and Bhāb Bācya (Neuter Voice/Intransitive Voice/Impersonal Voice). The voice in which verb agrees with the Subject in terms of person called Kartṛ Bācya and where verb does not agree with the verb are called Bhāb Bācya. Though he did not ignore Karma Bācya and he say there are a very few example of karma Bācya which are made of 'Par' verb. In terms of agreement feature he put them into Kartṛ Bācya. He thinks that the concept of Karma-Kartṛ Bācya is derived from ātmanepada verbs of Sanskrit and it is just one type of Kartṛ Bācya. But his simplified explanation about concept of voice through agreement can't offer clear-cut standards to determine different voices.

Pabitra Sarkar (2006) observed the Bānglā Voice system and tried to give an explanation of different type of Bānglā voices. He also thinks that there are only two type of voice in Bānglā; Kartṛ Bācya (Active Voice) and Bhāb Bācya (Neuter Voice/ Intransitive Voice/ Impersonal Voice). According to him Karma-Kartṛ Bācya is one type of Kartṛ Bācya and there are three types of Bhāb Bācya: 'Sammandha Karta Bhab Bācya, Kartāhin Bhāb Bācya and Gaunakarma Kartā Bhāb Bācya. He reexamined the traditional description of Karma Bācya. He put these examples either in Kartṛ Bācya or in Bhāb Bācya. His proposal is that karma or object does not get prominence in Bangla passive, so there is only Bhāb Bācya. He describes the verbs of Bhāb Bācya in details and defines according to the verbs.

Probal Dasgupta (2018) discussed about Bhāb Bācya or Impersonal Passive in his paper 'Bādhyata and Bhāb Bācya'. He compared the Bangla passive with German and English passive in his paper.

3. Types of Bānglā Grammatical Voice

Suniti Kumar Chatterjee defined the types of Bācya through the grammatical relations. Uddeśya (Subject), Mukhya Karma (direct object), and Gauna Karma (indirect object), Kriyā (verb) must be taken here as primitives. In particular they could not be defined in terms of other properties word order or phrase structure configuration.

A Bānglā sentence has two parts Uddeśya (Subject) and Bidheya (Predicate). About whom something can be stated is the uddeśya or subject and what can be stated about the subject is the bidheya or predicate. There is a difference between Uddeśya and Kartā. **Kartā** is more like Agent, an animate participant which is doing or causing something, possibly intentionally.

There are four types of Bācya in Bangla. They are:

1. Kartṛ Bācya (Active Voice)
2. Karma Bācya (Passive Voice)
3. Bhāb Bācya (Neuter Voice/ Intransitive Voice/ Impersonal Voice)
4. Karma-Kartṛ Bācya (Middle Voice/ Quasi-Passive Voice)

Here are to illustrate the four kinds of Bācya mentioned above.

2.1. Kartṛ Bācya

If the form of verb shows the particular relationship between kartā and their corresponding verb and the karta or subject of verbs is responsible for 'doing of action', and then this voice is called Kartṛ Bācya. Here the Verb must agree with Subjects in terms of person. This voice encodes the doing of action. The action notionally exhibits from the stand point of most dynamic, or active, party involve in the situation, typically the subject.

1. rām-ke ami ḍāk-b-o
   ram-ACC i.NOM call-FUT-1
   'I'll call Ram.'

2. baba-ф chinṭu-ke mar-l-en
   Father-NOM chinṭu-ACC beat-PST-3SG
   'Father beat Chinṭu.'

2.2. *Karma Bācya*

If the voice encodes action which notionally exhibits from the stand point of non-dynamic, typically static participant involved in the situation, such as the karma or object of a transitive verb and the form of verb shows the particular relationship between karma/object and the Verb, and the action of verb is addressed to the karma than the kartā then the voice is called Karma Bācya. Here karma occupies the subject position.

3. puliś-er hat-e cor-ϕ dhar-ā par-ech-ϕ-e
   police-GEN hand-INS thief-NOM catch-NMLZ AUX-PFV-PRS-3
   'Thief has been caught by the police.'

4. chinṭu- ϕ baba-r hat-e mar khe-l-o
   chinṭu-NOM father-GEN hand-INS beat AUX-PST-3SG
   'Chinṭu was beaten by father.'

2.3. *Bhāb Bācya*

If the verb seems to be the most important part of a sentence instead of the karta and karma then the voice is called Bhāb Bācya. The basic verb is nominalized and followed by a finite form of verb 'ha', 'jā', 'āch', 'par', 'cal' etc. However, this verb does not have the conventional lexical sense; rather, it serves as a grammatical marker, signaling omission of the basic subject or kartā. The result is a structure in which the subject is suppressed, or a subjectless clause. So, the nominalized verb here occupies the subject position. So there is no Subject-Verb agreement in this voice.

5. āmā-ke dekh-ā jā-ϕ-y
   i-DAT see-NMLZ AUX-PRS-3
   'I can be seen.'

6. āmā-r bhāt-khā-oyā ha-ech-ϕ-e
   i-GEN rice-eat-NMLZ AUX-PFV-PRS-3
   'I am done eating rice.'

7. tār jar ha-ech-e
   he.GEN fever be-PFV-3SG
   'He is having fever.'

2.4. *Karma-Kartṛ Bācya*

Sometimes it is difficult to determine the subject of the sentences. Because Karma or object occupies the subject position and verb agrees with the object in term of person. Object both performs and receives the action expressed by the verb. This type of voice is called Karma-Kartṛ

Bācya. The karta cannot appear and karma or object acts as a logical subject in this voice. Karma-Kartṛ Bācya displays characteristics of both the Kartṛ Bācya and the Karma Bācya. In this construction, the viewpoint is active in that the action notionally exhibits from the standpoint of most dynamic participant in the depicted situation. But the same participant has patient like characteristics as well, in that it sustains the action's principal effects.

8. kalsi-ϕ bhar-ϕ-e
pitcher-NOM fill-PRS-3
'The pitcher is being filled.'

9. tār bai-khani-ϕ bājār-e beś kāṭ-ch-ϕ-e
he.GEN book-CLF-NOM market-LOC quite hit-PROG-PRS-3
'His book is quite hit in the market.'

According to Panini's sutras, in Karma-Kartṛ Bācya the Kamas or object of the transitive verb functions as a subject which has a marked facility of action ('Swayameba Prasidhyati'/self-act). Above examples follows this rule and they are realized as 'The pitcher is being filled itself' and 'Rice is being cooked itself.' But we all know someone fill the pitcher and some cook the rice. There are a lot of example we found in traditional Bānglā grammar, where the object are realized as 'Swayameba Prasidhyati'. Consider those examples:

10. phal-ϕ pek-ech-ϕ-e
fruit-NOM ripe-PFV-PRS-3
'The fruit has ripened.'

11. śnakh-ϕ bāj-ϕ-e
conch-NOM play-PRS-3
'Conch plays.'

But these are not of examples Karma-Kartṛ Bācya, because 'pekeche' and 'bāje' are not transitive verb, they are intransitive, so 'phal' and 'śnakh' are not object here, actually they are subject here. Yes, these subjects are realized as a 'Swayameba Prasidhyati' (Self-act) but they are not subject of transitive verbs.

4. Impact of Case System on Voice in comparison with Tamil voice system

In Tamil, the Kartā is in Nominative case in active voice. Here, the nominative case is not marked on the noun by means of a case suffix or postposition. Karma or Object is in accusative case and marked with '–ai' suffix. Verb agrees with karta or subject in terms of number, person and gender

12. kūṭṭam avaḷ-ai nerunk-iṉ-atu
crowd.NOM she-ACC approach-PST-3SG.N
'The crowd approached her.'

13.	appā	kumār-ai	aṭi-tt-āṉ
	father.NOM	kumār-ACC	beat-PST-3SG.M
	'Father beat Kumar.'		

Similarly in Kartṛ Bācya or Bānglā active voice, Kartā or Subject are in Nominative Case and receives ɸ marker (Śunna Vibhakti).Object is in Accusative Case and generally receives -ke' marker in animate object and ɸ marker in inanimate object or indefinite animate object.

14.	rām-ke	ami	ḍāk-b-o
	ram-ACC	i.NOM	call-FUT-1
	'I'll call Ram.'		

15.	baba-ɸ	chinṭu-ke	mar-l-en
	Father-NOM	chinṭu-ACC	beat-PST-3SG
	'Father beat Chinṭu.'		

In Tamil ***passive voice***, Karta is in instrumental case and receives 'āḷ' case marker and karma is in nominative case and occupy the subject position. The verb 'paṭu' (experience) use as auxiliary verb after a main verb in infinitive form to express the passive voice.

16.	kumār	appā-āḷ	aṭi-kk.ap	paṭ-ṭ-āṉ
	kumar.NOM	father-INST	beat-INF	AUX-PST-3SG.M
	'Kumar was beaten by father.'			

17.	kabhitai	avaḷ-āḷ	eṛud-ap	paṭ-ṭ-atu
	poem.NOM	she-INST	write.INF	AUX-PST-3SG.N
	'The poem was written by her.'			

The passive voice construction of Bānglā occurs in little similar way with Tamil. In Karma Bācya or Bānglā Passive voice, Karma or object is in Nominative case and generally receives ɸ marker and if kartā is present then it is in Instrumental case and generally receives –e marker. Karma occupies the logical subject position. Like Tamil, in Bānglā passive the main verb followed by an auxiliary verb. But main verb becomes nominalized here.

18.	puliś-er	hat-e	cor-ɸ	dhar-ā	par-ech-ɸ-e
	police-GEN	hand-INS	thief-NOM	catch-NMLZ	AUX-PFV-PRS-3
	'Thief has been caught by the police.'				

19.	chinṭu- ɸ	baba-r	hat-e	mar	khe-l-o
	chinṭu-NOM	father-GEN	hand-INS	beat	AUX-PST-3SG
	'Chinṭu was beaten by father.'				

In Tamil ***Impersonal passive***, karma or object is in dative case occupies the subject position and receives ‘kku or ukku’ suffix. But karma does not prominence in the sentence. So in this voice, verbs are always morphologically defective and they are always marked with 3rd person-singular-neuter suffix.

20. avar-ukku juram-āka uḷḷ-atu
he-DAT fever-BEN be-3SG.N
‘He is having fever.’

21. eṉa-kku pāṭṭup pāṭap piṭikk-um
i-DAT singing song like-3SG.N
‘I like singing songs.’

There are two ways which makes Bhāb Bācya or Bānglā impersonal passive. First, like Tamil Karma or object is in dative case and receives –ke, -y marker. Gauna karma which is in dative case is kartā here.

22. āmā-ke dekh-ā jā-ϕ-y
i-DAT see-NMLZ AUX-PRS-3
‘I can be seen.’

Alternatively Karta is in genive case and receives –r marker.

23. āmā-r bhāt-khā-oyā ha-ech-ϕ-e
i-GEN rice-eat-NMLZ AUX-PFV-PRS-3
‘I am done eating rice.’

24. tār jar ha-ech-e
he.GEN fever be-PFV-3SG
‘He is having fever.’

In Bānglā Quasi-Passive voice or Karma-Kartṛ Bācya, Kartā cannot appear here and Karma or object is in Nominative case and only receives ϕ marker.

25. kāpar-ϕ chir-ech-e
sari-NOM tear-PFV-3
‘Sari has torn.’

26. bahu kasṭ-e din-ϕ kāṭ-ch-ϕ-e
great difficulty-INS day-NOM go-PROG-PRS-3
‘Days are going with great difficulties.’

Quasi-Passive voices are not used in Tamil.

It is seeing that logical subject of all voices except impersonal or intransitive passive voice is in nominative case in both Bānglā and Tamil. The nominative logical subject codes agreement on the verbal predicate with respect to person, number and where appropriate gender and status.

Agreement is an indicator of subject relation. Tamil and Bānglā both have free word order and thus the subject does not occupy a fixed position in the sentence. Nor does case marking indicate the subject function. Even though in the active voice, the subject or kartā occurs in nominative case, but this nominative case form cannot be regarded as an indicator of the subject. Because Impersonal passive showed that subject in Tamil and Bānglā do not always have subject function and we can see that the karma or object occupies the logical subject position and retain the dative case marking,

Subject case marking is often an issue of discussion. This is so, because the assignment of the subject marking to the object is one of the clear signs of the passivization. In Bangla, the case marking system creates some puzzling effects. Consider the example:

27. rām-ke bal-ā ha-ϕ-y
ram-DAT say-NMLZ AUX-PRS-3
'Ram is said.'

28. cor-ta-ke dhar-ā ge-l-o
thief-CLF-DAT catch-NMLZ AUX-PST-3
'The thief was caught.'

According to grammarian S. K. Chatterji, these are Bangla Karma Bācya examples, because the logical object retains the -ke marking and syntactically speaking, they do not contain the grammatical subject. In this situation the analysis is more complex. The logical direct objects retain its original form and the verb itself does not mark for 1st and 2nd person.

If we see these by case feature we find that these sentences are not in Karma Bācya. In terms of Case marking, these sentences are examples of Bhāb Bācya. Though Karma or object gained prominence in the meaning, but cannot act as a logical subject. Karma is in dative case and receives –ke, -y marker. So verb cannot get the object and marked itself by 3rd person agreement marker. Karta is not appearing here.

Another puzzling situation has shown between Karma Bācya and Bhāb Bācya. Consider the following examples:

29. dur theke C̃ād -ϕ choṭo dekhā- ϕ- y
far from moon-NOM small see-PRS-3
'Moon looks small from a far.'

Suniti Kumar Chatterjee claim that the example 27 is in Karma Bācya. According to him 'C̃ād' is in Nominative case here and the verb 'dekhāy' agrees with the subject 'C̃ād' in terms of

person. But we suggest that here 'C̃ād' is not in nominative case in the first sentence. Let's compare these with following sentences:

30. *dur theke se-ϕ choṭo dekhā- ϕ- y
far from he.NOM small see-PRS-3
'He looks small from a far.'

31. dur theke take choṭo dekhā-ϕ- y
far from he.ACC small see-PRS-3
'He looks small from a far.'

The sentences is in 28 are unacceptable in Bangla. In the example above when the subject is in nominative case are not accepted by the Bangla native speaker. But the example in 27 is accepted in Bangla. Because C̃ād' in sentence 27 is not in Nominative case, it is in Accusative case. C̃ād is an inanimate object. So '–ke' marker is optional here. So the sentence no. 23 is also an example of Bhāb Bācya. Here Verb can't agree with the accusative case marked subject, so verb marked with 3rd person agreement marker.

Let's summarize the Bānglā voices in terms of case system:

Name of Voices		
Kartṛ Bācya Or Active Voice	Nominative Case Marked Subject	Nominative Case marked Kartā (Kartṛ Bācya)
		Nominative Case marked Karma/object (Kama Bācya), Karta is optional here.
		Nominative Case marked inanimate object or Karma. (Karma-Kartṛ Bācya) Karta cannot be present here.
Bhāb Bācya Or Impersonal	Other Case Marked Subject	Karta is in Genitive Case.
		Karma or object is in Dative Case. Karma acts as karta.
		Karma is in Accusative case. Here Karta cannot be present.

Table 1: The Bānglā voices in terms of case system:

5. Conclusion

Grammatical agreement is also an important factor for voices. It defines particular relation between subject, object and verb. But here we can see that Case marking is also a good indicator of the Bangla Voice system. We see that the feature Case more clearly defines the voices. The feature agreement says us there are two types of voices Kartṛ Bācya or Active voice and Bhāb Bācya or Impersonal passive voice. Karma Bācya or Passive voice and Karma-Kartṛ Bācya or Quasi-Passive voice is the part of Kartṛ Bācya. But case feature shows us different types of Bhāb

Bācya and why grammatical agreement cannot work in this voice. The research is not finished yet. There are many features that we need to check and we thought this aspects needs to be explored more to arrive at some definite conclusion.

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Extension relations in the genre of court decisions

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A B S T R A C T
While the research into legal language has gained a considerable attention by many linguists, few studies have been conducted to explore the linguistic features of the court decisions. Thus, the current article adopts Halliday's Systemic Functional Grammar as a theoretical framework for investigating the lexico-grammatical features of the court judgements. According to Halliday, two intersecting dimensions can account for the way in which clauses are combined to form clause complexes. The first dimension is known as *taxis,* which refers to the type of interdependency between paired clauses—that is, combined clauses can be of equal or unequal status. Clauses of equal status are said to be in paratactic relations and clauses of unequal status are in hypotactic relations. This dimension crosscuts another dimension referred to as the logico-semantic relation which has the function of identifying the semantic relations between the combined clauses (Butler 2003: 260). Logico-semantic relations are classified into two major categories, i.e. *expansion* (where one clause expands the meaning of another clause by elaborating, extension or enhancing) and *projection* (where one clause projects the meaning of another clause by a mental or verbal process). However, due to the space restriction, this study will be limited to exploring only one type of the expansion relations (i.e. extension) in the genre of court decisions. A total of six court judgements are taken for the analysis, three are sourced from the criminal law and three from the civil law.

1. Introduction

Court decisions are regarded as an important genre of the legal discourse because they have important function in the society by settling disputes between opposing parties. Thus, the language of court judgements has to be unequivocal, sober and persuasive. These features make the legal judgment precise and compact leaving no space for misinterpreting it. To this end, the law practitioners should have a deep understanding of the dispute in a particular case and they should have a good command of the English language in order to deal with the judicial system skillfully. Notwithstanding the significance of this particular genre, namely court decisions, less

work has been conducted to explore its linguistic features (e.g. Richards & Curzon 2007, Bhati 1993, Kerr 2007, Maley 1994). In fact, legal judgements serve different functions; their language is oriented towards the past, present and future events (Maley 1994: 47). A judgment is first supposed to give a recount of the case history, and refer to the present status of the disputing parties, after that a final opinion is given by the judiciary based on reasoning. This court judgment will serve as a landmark for future cases. Therefore, writing a legal judgment is not a pure mechanical process manifested by applying the rules of a particular law to a particular case, rather it is a based on meticulous legal reasoning which "describes what judges do to justify their decision when they *cannot* demonstrate or prove that they have reached the right answer" (Carter and Burke 2002: 16). Unravelling the way texts are constructed needs a theory of grammar that focuses on the syntax-semantics interface (i.e. Systemic Functional Grammar). Other types of grammar, such as traditional grammar, cannot adequately account for how the semantic relations are realized by grammatical patterns. In SFG, Matthiessen and Halliday (2009: 87) view language as a stratified semiotic system that is consisting of three strata: the semantic stratum is realized by the lexico-grammatical one which in turn represented by the phonological/graphological stratum. Besides that, language is interpreted as a metafunctional semiotic system (Caffarel et al 2004: 10). Metafunctions refer to the highly generalized functions that are organized in parallel order within the semantic and grammatical stratum (i.e. interpersonal, textual and ideational) (Matthiessen et al 2010 :138). The ideational metafunction is further classified into experiential and logical. SFL also views language as a set of resources for meaning making that are identified at the lexico-grammatical level. Thus, in this study the resources of the logical metafunction are explored in the court resolutions with a particular focus on the extension relations. Before that, a brief explanation of the logical metafunction is presented in the following section.

2. Research objectives

The aim of this article is to answer the following question:
How extension relations work as a meaning making resource in the genre of court judgments.
To answer this general question, we need to explore how the logico-semantic system (i.e. extension relations) intersect with the tactic system (i.e. paratactic and hypotactic) and highlighting the frequently occurring patterns in the analyzed data.

3. Theoretical framework

3.1 The concept of metafunction

As stated above, metafunction is a key concept in SFL because it provides fundamental perspectives of understanding the language phenomenon. The early formulation of this concept (i.e. metafunction) can be traced back to an early article by Halliday (1967) where he states that a clause in English is considered to have three main syntactic choices, namely, Transitivity, Mood, and Theme. Halliday (1969: 81) regards the abovementioned choices as systems. He points out that Transitivity refers to what Daneŝ calls "the semantic structure of sentences". Mood refers to the relationship between the participants and Speech role in a speech situation. This includes Bühler's "speaker attitude" and "the speaker's intention to influence the listener." The Theme is equivalent to Mathesius' "functional sentence analysis" and Daneŝ' "organization of utterance". On the basis of the above statements, Halliday concludes that the clause embodies three types of options: experiential, interpersonal and intratextual. These options are called components. Later

in 1970a, Halliday renamed these components into functions or metafunctions. These metafunctions are encoded in each clause simultaneously. Halliday gives us a complete presentation of his metafunctional thinking through a series of writings (1985, 1994, 2004 and 2014).

Having provided a brief account on the early formulation of the concept of metafunction, we move towards looking into how Halliday deals with them in his (IFG). The interpersonal metafunction enacts the speaker to participate in social activities and establish social relations. The textual metafunction is concerned with the organization of the text through the realization of the interpersonal and ideational metafunctions in the form of information that can be shared. The ideational metafunction is concerned with the representation of the speaker's experiences of the outer world and his inner world of consciousness. The ideational metafunction is subdivided into experiential and logical metafunctions. The experiential metafunction realizes experiences in a clause structure through the system of transitivity. The logical metafunction is concerned with the logical structure between clauses forming bigger lexicogrammatical units, *i.e.* clause complex. In other words, the logical metafunction provides grammatical resources for creating logical connectedness between experiential events. The logical metafunction is governed by two systems: the tactic system and the logico-semantic system. These systems are discussed below.

3.2 The logical metafunction

As it was highlighted above, the main aim of this article is to investigate the lexico-grammatical features of the legal judgements particularly at the clause level. The exploration here is restricted to the logical mode which is a subset of the ideational metafunction, the other being the experiential mode. In general, the ideational metafunction is concerned with the aspects of grammar involved in construing the experience of the writer/speaker. The experiential mode of the ideational metafunction refers to the direct representation of the reality by the system of Transitivity within the clause structure. The logical mode, however, refers to the abstract realization of reality that is through building connectedness between the meanings of clauses (Halliday 1979: 74). The resources involved in creating meaning relations between clauses are the taxis and the logico-semantic systems. These systems work "alongside the experiential structures of Transitivity. Together, the logical and the experiential functions allow us to express ideational meanings as we turn life into text" (Eggins 2004: 256). The taxis and the logico-semantic systems are involved in the formation of what is known in SFG as the clause complex. The term clause complex refer to the grammatical unit formed when two or more clauses are combined together. This is what is known in traditional grammar as coordination and subordination. While the analysis of these units is structurally based in traditional grammar, functional grammar takes the analysis to a more delicate level focusing on the logico-semantic and the interdependency relations between the clauses forming clause complexes. With regard to the logico-semantic relations, Halliday proposes two major relations that can account for the clause complexes, i.e. expansion and projection. In expansion relation, a clause may expand the meaning of another clause by elaborating it, extending it or enhancing it. In projection relation, the meaning of one clause is projected by another clause that instantiate it as a locution or an idea (Qingshun 2013: 3). This logico-semantic system is crosscut simultaneously by the taxis system where Halliday differentiates between two types of relations parataxis (i.e. clauses of equal relations) or hypotaxis (i.e. one clause is dominant and another is dependent). Since the focus of the current study is on a particular type of expansion relations, that is extension relations, the

following section will provide a brief explanation about how this type of relation intersect with the taxis system to produce different categories of extension relations.

3.3 Extension relations

Extension refers to the relation where the meaning of a clause is developed by another clause via adding something new. This type of relation is represented by the symbol + 'plus'. Halliday recognizes three main subcategories of extension relations: *addition*, *variation* and *alternation*. Addition relation is further subdivided into *additive* (i.e. *positive additive* or *negative additive*) and *adversative*. Similarly, variation is subdivided into *replacive* and *subtractive* (see table 7-9 IFG: 471). These logico-semantic categories of extension relations intersect with the taxis system and result in a total of 14 categories as shown in figure 1 below:

Extension (14) categories: Addition, Variation and alternation
Addition (7 categories) 3 paratactic additive categories: i. paratactic additive positive ii. paratactic additive negative iii. paratactic additive adversative 4 hypotactic additive categories: i. finite hypotactic additive positive ii. non-finite hypotactic additive positive iii. finite hypotactic additive adversative iv. no- finite hypotactic additive adversative
Variation (5 categories) 2 paratactic variation categories: i. paratactic variation replacive ii. paratactic variation subtractive 3 hypotactic variation categories: i. non-finite hypotactic variation replacive ii. finite hypotactic variation subtractive iii. non-finite hypotactic variation subtractive
Alternation (2 categories): i. paratactic alternation ii. finite hypotactic alternation

Figure 1, *subcategories of* extension *relations*

These categories will be used to guide the analysis of the present data.

4. Extension as a meaning-making resource in the court decisions

Analyzing court decisions has demonstrated that extension relations are regarded as important resources for constructing court judgments. There were 249 instances of extension relations. Out of these, *the paratactic additive positive* relations were of the highest occurrence in court decisions constituting 209 instances. This was followed by *paratactic additive adversative* with

12 instances. Variation relations in general scored only 8 instances. Some *extension relations* had no occurrence in the corpus; these will be referred to in the summary section. The following subsections will discuss each type of extension relation in detail.

4.1 Addition

In addition relation, two situations are represented as adjoined in a relationship of equality that is *positive*, *negative* or *adversative* (Downing and Locke 2002: 287). Since these categoreis can be realized paratactically or hypotactically, the discussion will be presented under tow subsections: i. *paratactic addition relations*, and ii. *Hypotactic addtion relations*.

4.1.1 Paratactic addition relations

Court decisions favored the first type of *paratactic addition* relation; namely *positive paratactic additive* one. This type of relation is expressed by the use of the coordinating conjunction '*and'*, '*but also'* or *'as well'.* Most of the *paratactic additive positive* relations were introduced by the conjunction *and*. Conjunctions like *but also* and *as well* were used only 4 times in the data. As stated above *positive paratactic additive* relations were widely used throughout the data, constituting 83.40 per cent (209 out of 249 extension relations). This is followed by *adversative paratactic* addition relations 4.86 percent (12 out of 249 extension relations). *Negative paratactic additives* expressed by the word 'nor' constituted only 1.62 percent (4 out of 249 extension relations).

4.1.1.1 Paratactic additive positive

The data showed a significant use of *paratactic additive positive* relations. This relation is expressed by *'and'*. By analyzing the discursive structure of the Court decisions, a narrative feature was noted to be emerging as the text unfolds. This can be seen particularly in the second move of the court resolutions, namely establishing the facts of the case (see Bhatia, 1993: 230). In this move, the story of the case is narrated in detail. Thus, in order to accumulate the flow of events in an intact discursive way, legal drafters make use of the *paratactic additive positive* relations. The compactness of the accumulated events or as what Halliday calls 'texture' is often represented through the ellipsis of the Subject in the extending clause of *paratactic* relation. The ellipsis of the subject is indicated by the symbol ∅ as can be shown in the example below:

1	1	A 'contract of service' implies relationship of master and servant
	+2	and ∅ involves an obligation [[to obey orders in the work to be performed and as to its mode and manner of performance.]]

(Rsgilladvgoogle. blogpost: 2016)

Paratactic additive positive relations enjoyed different structural contexts, that is being in single nexus relations (as in 2) or in chains (as in 3). The other favored structural contexts for *paratactic additive positive* relations are: i. nested in a projected clause (as 4); ii. qualifying an enhancing clause (as 5); iii. in a subcomplex of a dominant clause (as 6).

2	1	Consequently, Issue No. 1 was decided against the plaintiff
	+2	**and** Trial No. 4 was decided in favour of the defendants.

（Indiankanoon：2011）

3	1	In the result, we allow this appeal,
	+2	**set** aside the order [[dated 6.2.2003 passed by the National Consumer Disputes Redressal Commission, New Delhi in Original Petition No.121 of 1995]]
	+3	**and** remit back the original petition to the National Consumer Disputes Redressal Commission to be decided in accordance with law.

(Rsgilladvgoogle. blogpost: 2016)

4	α		She disclosed more than once
	"β	1	that the accused persons used to tease her for about 5-6 months prior to the incident
		+2	**and** that she used to talk to them as well.

(Indiankanoon: 2016)

5	α		Her immature perception of life <u>reached</u> its zenith
	xβ	1	**when** on certain occasions she <u>used to hide</u> the keys of the motorcycle
		+2	**and** <u>close</u> the gate..

(Judgements on divorce blog: 2013)

6	α	1	The cruel behaviour of the wife <u>has frozen</u> the emotions
		+2	**and** <u>snuffed out</u> the bright candle of feeling of the husband
	xβ		**because** he has been treated as an unperson.

(Judgements on divorce blog: 2013)

5.1.1.2 Paratactic additive negative

The findings show that the use of type category of extension relation has little preference in the court decisions; only four instances were found in the data. This relation can be established by the coordinating conjunctions 'neither… nor' (as in) or by simply the word 'nor' (as in

7	α	1	They have **neither** made any complaint
		+2	**nor** taken any steps
	xβ		**to** get over the contents of the letter [[written on behalf of the firm on 30.3.1991.]]

(Indiankanoon: 2016)

8	α		It was enunciated
	"β	1	**that** the doctrine of presumption <u>is</u> not alien to the above rule,
		+2	**nor** <u>would it impair</u> the temper of the rule qua the purport of presumption of fact as a rule in the law of evidence.

(Indiankanoon: 2016)

It is clear that in the above examples, the word 'nor' is used to indicate a negative state in the continuing clause that extends something else negative referred to in the initiating clause.

5.1.1.3 Paratactic additive adversative

Compared to the occurrence of paratactic additive positive, paratactic additive adversative relations had less frequency in the data. There were only 12 instances in the whole data. This relation is expressed by the coordinating conjunction 'but' to indicate a contrasting relation to the primary clause. Examples of paratactic additive adversative relations are:

9	1	The operating surgeon had ordered procaine on the telephone,
	+2	**but** the resident house surgeon (who was then unqualified) had mis-heard "procaine" as "cocaine",
	+3	**and** had told the pharmacist to dispense a mixture [[which was, in fact, lethal.]]

10	1	This witness was declared hostile
	+2	**but** did not budge from his statement in his examination-in-chief.

(Indiankanoon: 2016)

As can be seen in clause 9, the conjunct 'but' suggests a contrary result to that of the initiating clause. In 10, however, the continuing clause expresses concession relation rather than expressing ideas contrary to expectation. Thus, its hypotactic agnate would be:

Although this witness was declared hostile, he did not budge from his statement in his examination-in-chief.

5.1.1.4 Paratactic extension relations in chains

Before concluding this section of *paratactic extension* relations, we can refer to some patterns emerging during the analysis. These patterns can be classified into two categories: i. Chains of *paratactic extension* relations having the same logico-semantic subcategory and ii. Chains of *paratactic extension* relations with a change in the logic-semantic category. These patterns will be discussed as follows:

i) Chains of paratactic extension relations having the same logico-semantic subcategory

This type of clausal relations is exclusively applied to the addition subcategory. Paratactic additive chains having the same logico-semantic relation can be found in the final move of court decisions which is called 'pronouncing judgment' (Bhatia 1993: 230). This part shows the final remarks reached by the judge(s) regarding a specific case. For example:

11	1	In the result, we allow this appeal,	
	+2	**set** aside the order dated 6.2.2003 passed by the National Consumer Disputes Redressal Commission, New Delhi in Original Petition No.121 of 1995	ext/para/add/ positive
	+3	**and** remit back the original petition to the National Consumer Disputes Redressal Commission to be decided in accordance with	ext/para/add/ positive

		law.	

(Indiankanoon: 2004)

Chains of paratactic additive positive relations may also occur in a subcomplex clause of verbal projection. These instances are found in the first sub-move of the third main move of the court judgment, which is called ‘giving history of the case’. This sub-move recounts the procedural history of the case; information of a witness related to the concerned case is also presented here. For example:

12	α		The informant stated	
	"β	1	**that** the appellants had come in a jeep [[bearing No. UP 015 5330]]	Verbal projection
		+2	**and** had forced her husband in the said jeep	ext/para/add /positive
		+3	**and** had taken him away.	Ext/para/add /positive

(Indiankanoon: 2016)

ii) Paratactic extension chains with a switch in the logico-semantic subcategory

Unlike *paratactic extension* chains of the same logico-semantic category, paratactic extension chains with a switch in the logico-semantic category were less in occurrence. A switch in a chain of a *paratactic extension* relation is not restricted to only one subcategory. In other words, a switch can occur in the chain from *addition* to *alternation*, *additive positive* to *additive adversative* or *additive adversative* to *additive positive* as can be seen in the examples below:

a. A switch from additive to alternative

13	1	The Consumer Forum is primarily meant to provide better protection in the interest of the consumers	
	+2	**and** not to short circuit the matter	ext/para/add /negative
	+3	**or** to defeat the claim on technical grounds.	ext/para/alt

(Indiankanoon: 2004)

b. A switch from additive positive to additive adversative

14	xβ		**As** the cruelty <u>became</u> intolerable,	enh/hyp/temp/ same time/point/ f
	α	1	the appellant <u>visited</u> his in-laws	
		+2	**and** <u>disclosed</u> the same	ext/para/add/p ositive
		+3	**but** it <u>had</u> no effect on her behavior.	ext/para/var/ad versative

(Indiankanoon: 2012)

c. A switch from additive adversative to additive positive

15	1	The operating surgeon had ordered procaine on the telephone,	
	+2	**but** the resident house surgeon (who was then unqualified) had mis-heard "procaine" as "cocaine",	Ext/para/add/adversative
	+3	**and** had told the pharmacist to dispense a mixture [[which was, in fact, lethal.]]	ext/para/add/positive

(Indiankanoon: 2004)

As can be noted, the resources of addition are exploited to achieve rhetorical movement in the discourse. Moreover, the use of ellipsis in the continuing clauses "enable the same subject to be maintained which proved to be a useful grammatical strategy to move the discourse forward" (Sriniwass 2006: 240).

5.1.2 Hypotactic addition relations

The table 1 shows that 12 instances of *hypotactic addition* relations were found in the data. *Hypotactic addition* is subcategorized into 2 major subcategories: *additive positive* and *additive adversative*. Each subcategory is comprised of the *finite* and *non-finite* variant. The table below shows the principal markers that are used to construe the *hypotactic addition* relations in court judgments:

Table 1 Distribution of hypotactic addition relations

Non-finite Hypotactic additive positive (6)	*Divorce (0)*		
	Consumer protection (3)	2.46	requisitioning
		2.47	issuing
		2.70	leaving
	Land property (0)		
	Murder (1)	4.60	disclosing
	Rape (0)		
	Corruption (2)	6.2	inviting
		6.37	holding
Finite hypotactic additive adversative (6)	*Divorce (1)*	1.16	whereas
	Consumer protection (0)		
	Land property (2)	3.67	while
		3.37	whereas
		3.115	while
	Murder (1)	4.35	whereas
	Rape (0)		
	Corruption (2)	6.47	while

		6.51	While

As can be seen in the table above, court judgments did not have instances of *finite hypotactic additive positive* and *non-finite hypotactic additive adversative* relations. Therefore, the subsections below will discuss only the *non-finite hypotactic additive positive* and *finite hypotactic additive adversative* relations.

4.1.2.1 Non-finite hypotactic additive positive

The table 1 above indicates that there are no prepositions (e.g. *with, as well as,* etc.) to signify the *non-finite hypotactic additive* relations. This confirms what Halliday and Matthiessen (489: 2014) state "[…] when a non-finite clause occurs without a conjunction, there is no doubt about its *hypotactic* relation in a clause complex; but there may be no indication of its logical-semantic function". Therefore, they suggest a solution to decide the type of logico-semantic relation that is by finding the nearest finite agnate clause. For example:

16	α		She stated as well, in terms of the FIR filed,	
	"β	α	**that** the appellants had visited her house [[15 days prior to the date of the incident looking for her son Vinod]],	Verbal projection
		+β	**disclosing** it to her [[that they suspected that he was involved in the murder of the son of Chaman.]]	ext/hyp/add/positive/n fin

(Indiankanoon: 2016)

When converting the *non-finite hypotactic additive* clause into its finite counterpart, the above clause complex will be:

- *She stated as well, in terms of the FIR filed, that the appellants had visited her house [[15 days prior to the date of the incident looking for her son Vinod]],* ***and they disclosed*** *it to her [[that they suspected that he was involved in the murder of the son of Chaman.]]*

5.1.2.2 Finite hypotactic additive adversative

A dependent clause can present a meaning which is in contrast with that of a main clause by utilizing one of these conjunctions '*while*' or '*whereas*'. For example:

17	α	Issue Nos. 2 and 3 were decided against the plaintiff,	
	+β	**whereas**, Issue Nos. 5 and 6 were decided in favor of the defendants.	ext/hyp/add/adv/fin

（Indiankanoon：2011）

The conjunctions '*while*' and '*whereas*' serve to contrast two phenomena which have a point of similarity between them. In the above example, 'whereas' is used to contrast *the decision of Issue No 2* with *the decision of Issue No 5 and 6.*

4.2 Variation

In variation relation, the meaning in the secondary/dependent clause replaces that of the primary/dominant clause either totally or partially. Variation can be of two types: *paratactic* and *hypotactic* variation. Table 2 below shows that altogether there were only 6 instances of variation relations (*i.e*. 3 *paratactic variation* and 3 *hypotactic variation* relations). The distribution of variation relations across the data along with their principle markers are presented in the table below:

Table 2, distribution of variation relations

Categories of variation relations (6)	***Court judgment***	**Clause No**	**Principle marker**
6. Paratactic variation replacive (2)	*Murder (1)*	4.29	but
	Rape (1)	5.60	and instead
7. Paratactic variation subtractive (1)	*Land Property (1)*	3.125	only
8. Non-finite hypotactic variation replacive relations (3)	*Divorce (2)*	1.10	instead of
		1.31	instead of
	Rape (1)	5.162	instead of

4.2.1 Paratactic variation

Variation relations are divided into two subcategories: *paratactic variation replacive* and *paratactic variation subtractive*. In *replacive* relation, the meaning in the second clause is represented as a total replacement of that of the primary clause. In subtractive nexus, however, the meaning of the second clause is presented as a partial replacement of that of the primary clause. As mentioned above the findings show that only 5 instances of *paratactic variation* (*i.e.* 3 *replacive* and 2 *subtractive*) were found across the data. This suggests that this category is not apparently significant in construing the meaning in the court judgments. An example of *paratactic variation replacive* is shown below:

18	α			She admitted	
	"β	1	xβ	**that** at the time **when** she was offered two idlis and a glass of water,	
			α	she did not cry for help	
		+2		**and instead** had made up her mind to teach the miscreants a lesson by informing the police.	Ext/para/varia/replacive

(Indiankanoon: 2016)

As can be seen, the proposition of the secondary clause '*She had made up her mind to teach the miscreants a lesson by informing the police*' is a total replacement of that of the primary clause '*she did not cry for help*'. An example of paratactic variation subtractive would be:

19	1	Law and Justice, more often than not, happily coincide,	
	+2	**only** rarely we find serious conflict.	Ext/para/varia/subtractive

(Indiankanoon: 2011)

Here the proposition of the secondary clause *'rarely we find serious conflict'* partially subtracts the proposition of the primary clause '*law and justice, more often than not, happily coincide*'.

4.2.2 Hypotactic variation

In the same way, *hypotactic addition* variation was of modest use. Altogether, there were only 3 instances of *hypotactic* relations. All of them were *non-finite hypotactic variation replacive*. These relations are marked by the use of 'instead of'. An example of *non-finite hypotactic variation replacive* relations found in the court judgments is given below:

20	+β	Even with the passage of time, **instead of** bringing maturity in the attitude of the respondent,	ext/hyp/variation /replacive/ n fin
	α	it brought a sense of established selfishness and non-concern for the children.	

(Indiankanoon: 2012)

5.3 Alternation

Alternation relation occurs when the meaning of the secondary clause occurs as an alternative to the primary clause. This relation is marked by the use of the conjunction 'or'. Alternation relation was not of significant use in the court judgments; only 3 instances of *paratactic of alternation* relation were found in the data. They are marked by the use of the conjunction 'or'. Instances of *hypotactic alternation* relations were not found in the court decisions. The instances of *paratactic alternation* relations are presented below:

21	1	The Consumer Forum is primarily meant to provide better protection in the interest of the consumers	
	+2	**and** not to short circuit the matter	ext/para/add/negative
	+3	**or** to defeat the claim on technical grounds.	ext/para/alt

(Indiankanoon: 2004)

22	α			The doctrine was also created	
	xβ	α		to prevent the waste of land	cause/purpose/n finite
		xβ	1	**by** forcing owners to monitor their property	enh/hyp/manner/means/n fin
			+2	**or** suffer the consequence of losing title.	Ext/para/alt

(Indiankanoon: 2011)

5. Conclusion

This article attempted an exploration on the intersection of the *tactic* and *extension relations* as an effective lexico-grammatical resource for meaning making in the genre of legal resolutions. Extension relations are classified into three main types: *addition*, *variation* and *alternation*. The result of the intersection between these subcategories with the tactic system is 14 coding categories. The classification of these categories and their percentage frequency distribution in the genre of court decisions is given in the table 3 below:

***Table 3**, classification of extension relations and their frequency distribution*

Categories of Extension Relations: 14		Divorce	Consumer protection	Land property	Murder	Rape	Corruption	**Total**	**%**
3 paratactic categories	i. paratactic additive positive	43	39	17	35	65	10	209	
	ii. paratactic additive negative	0	0	0	1	0	3	4	
	iii. paratactic additive adversative	2	1	1	3	2	3	12	
4 hypotactic additive categories	i. finite hypotactic additive positive	0	0	0	0	0	0	0	
	ii. non finite hypotactic additive positive	0	3	0	1	0	2	6	
	iii. finite hypotactic additive adversative	1	0	2	1	2	0	6	
	iv. non finite hypotactic additive adversative	0	1	0	0	0	0	1	
Total number of addition relations		46	44	20	41	69	18	**238**	(238/249) x100= **95.58**%
2 paratactic variation	i. paratactic variation replacive	0	0	0	0	2	0	2	
	ii. paratactic variation subtractive	0	0	0	2	1	0	3	
3 Hypotactic variation replacive	i. non-finite hypotactic variation replacive	2	0	0	0	1	0	3	
	ii. finite hypotactic variation subtractive	0	0	0	0	0	0	0	
	iii. non-finite hypotactic variation subtractive	0	0	0	0	0	0	0	

Total number of variation relations		0	0	0	0	0	0	**8**	(8/249) x100= **3.21**%
Alternation (2) categories	i. paratactic alternation	0	1	2	0	0	0	3	
	ii. finite hypotactic alternation	0	0	0	0	0	0	0	
Total number of alternation relations		0	0	0	0	0	0	3	(3/249) x100= **1.20**%
Total number of Extension relations		45	48	21	40	74	18	**249**	**100%**

The above table shows that a total of 249 extension relations were found in the data. Concerning the tactic system, extension relations were majorly realized paratactically, that is *paratactic extensions* made 93.57 per cent (233 out of 249) whereas *hypotactic extensions* made only 6.42 per cent (16 out of 249). These findings suggest that legal drafters have an inclination towards construing the history of the case through the resources of *paratactic extensions*. This confirms Halliday and Matthiessen's observation that *hypotactic extensions* are fairly rare compared to *paratactic extensions*. According to them, *hypotactic extension* relations are "the least common of the combinations of types of expansion with types of taxis" (2014: 474). Another interesting observation noted in the table above is that *paratactic additive positive* relations had the highest number of occurrence across the data, they made 83.94 per cent (209 out of 249). This was followed by *paratactic additive adversative* 4.82 per cent (12 out of 249). The findings show that the conjunction *and* was the most principal marker used for introducing *paratactic additive positive* relations followed by *but* for introducing *paratactic additive adversative* relations.

Some *paratactic extension relations* were found to be in chains. These chains were noted to occupy the third and the fourth move of the court decisions. They served to guide the rhetorical movements of the text either in the context of pronouncing the judgement or in the context of recounting the history of the case. Some of the extension relations were not used in the court resolutions, these relations are:

- *finite hypotactic additive positive* marked by *while* and *whereas*
- *non-finite hypotactic additive adversative* marked by *without*
- *finite hypotactic variation subtractive*
- *non-finite hypotactic variation subtractive*
- *finite hypotactic alternation*

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সংকেত ও অপার্থিব বাস্তবের ভাষ্য

শিবাংশু মুখোপাধ্যায়
ভাষা প্রযুক্তি গবেষণা পরিষদ, কলকাতা

১. গৌরচন্দ্রিকা

প্রাগৈতিহাসিক পৃথিবীতে মানুষের বিবর্তনের এক বিশেষ পর্যায়ে, মানুষ যখন বাস্তব জগতের সঙ্গে তার সম্পর্ককে বুঝে নিতে চাইল তখন সে ক্রমশ আবিষ্কার করল সংকেতন (সেমিওসিস) পদ্ধতি। সেই বিশেষ পদ্ধতির মাধ্যমে বিশ্বকে বুঝতে ও জানতে চাওয়ার সূত্রে – সে তার পারিপার্শ্বিক বস্তুজগত, ধারণার জগত, তার নিজস্ব ক্রিয়া-কর্মের জগত, এমনকি তার কল্পনার জগতকেও বিভিন্ন সংকেতের (সংকেতকে, সাইন/sign অর্থে ব্যবহার করেছি আদ্যন্ত রচনায়) মধ্যে দিয়ে অভিব্যক্ত করতে শিখল। যাতে বাস্তব জগতের সঙ্গে তার সম্পর্কের ভিত্তিতে গড়ে ওঠা এই সংকেতগুলোর মধ্যে দিয়ে নিজের কৌমের পরস্পরের মধ্যেও সম্বন্ধ অটুট থাকে। মানুষ সমাজবদ্ধ জীব হিসেবেই বিবর্তিত হয়েছিল প্রাকৃতিক নির্বাচনের সৌজন্যে। এইসব কথার অনেকটা অংশ ড্যানিয়েল এভারেটের থেকে ধার করে বলছি ঠিকই কিন্তু একটু পার্থক্য আছে - সে কথাও মনে করিয়ে রাখি। পার্থক্যের কথাটা আপাতত উল্লেখ করছি মাত্র, পরে কোনো একসময় অন্য কোথাও বিস্তারিত বলব। এভারেট মনে করেন, মানব বিবর্তনের এক বিশেষ পর্যায়, হোমো-ইরেক্টাস অবস্থা থেকেই মানুষ সংকেতের ব্যবহার করতে শেখে। আমার এ-কথা নিয়ে বিশেষ আপত্তি নেই, কেবল ওঁর নিশ্চিৎ বিশ্বাসের সপক্ষে উনি যে প্রমাণ দাখিল করেছেন সে বিষয়ে আমার সংশয় আছে। তবে এই রচনার মূল উদ্দেশ্য মানব-বিবর্তনের সাপেক্ষে তার আবিষ্কৃত সংকেতের বিবর্তনের কথা বলা নয়। মানুষ তার সংকেতন্ত্র নিয়ে প্রাগৈতিহাসিক যুগ ছেড়ে যখন সভ্যতার পৃথিবীতে এল, এবং ধীরে ধীরে সভ্যতার বিকাশের এক চরম জায়গায় পৌঁছলো তখন তার কমিউনিকেশনের ক্ষেত্রে কোনো সমস্যা হল না, কেননা বাস্তব জগতের ক্রমবর্ধমান বিকাশ ও জটিলতার সঙ্গে তালে-তাল মিলিয়ে সংকেততন্ত্র নিজেও হয়ে উঠল আরও জটিল ও বৈচিত্র্যময়। ফলে জ্ঞানতত্ত্বের ইতিহাসেও সংকেতের বিবিধ চরিত্র নিয়ে নানান রকম ব্যাখ্যা ও ভাষ্য তৈরি হতে লাগল। এখানে কথা বলব সেইসব ব্যাখ্যা আর ভাষ্যের কিছু জরুরি দিক নিয়ে। আর এরই সঙ্গে একটা জিজ্ঞাসা পাঠকের মধ্যে জিইয়ে রাখব - কেন কেবল মানুষই পৃথিবীতে বাস করতে গিয়ে এই সংকেতকেই তার যথাসর্বস্ব করে তুলল! আর তাই নিয়েই তৈরি হল আর-এক বিশ্ব যা 'ধরে নেওয়া' আসল বিশ্বের সমান্তরাল এবং সংকেতের আবিষ্কার সেই নকল এবং আসল বিশ্বকে এমনই বিস্ময়ের করে তুলল যে কোথাও-কোথাও আসল-নকলের পার্থক্য গেল গুলিয়ে। প্রাকৃতিক তথা স্বাভাবিক এবং সাংস্কৃতিক ওরফে চর্চিত বিষয়বস্তুর মধ্যেও সে দাঁড় করিয়ে রাখল আরও বড় এক জিজ্ঞাসাকে!

সমস্যার দৃষ্টান্ত দিয়ে কাজ শুরু করলে, সমস্যার গতিপ্রকৃতির আভাস আলোচনার শুরুতেই পাঠকের বুঝে নিতে সুবিধে হয়। এখন দুপুর গড়িয়ে বিকেলের দিকে। সকালে বেলার দিকে গণমাধ্যম মারফৎ খবরটা ছড়িয়ে পড়ল:

"অভিনেতা ইরফান খান প্রয়াত, বয়স হয়েছিল ৫৩ বছর" বা কোথাও "লড়াই শেষ হল, প্রয়াত বলিউড অভিনেতা ইরফান খান"। আমি খবরটা সংবাদ মাধ্যমের ওই হেডলাইনগুলো থেকে জানতে পারি নি। জেনেছি, দু-জন বন্ধুর প্রায় একই সময়ে হোয়াটসআপে প্রেরিত বার্তা থেকে। একজন কেবল লিখেছেন, "ইরফান খান" এবং ওই নামটার সঙ্গে স্পেস না দেওয়া একটা দুঃখের ইমোটিকন। আর-একজন তার প্রায় সঙ্গে সঙ্গেই পাঠিয়েছেন, "চোখে জল আসা" গোটা চারেক ইমোটিকন। আমি এই দ্বিতীয় বন্ধুকে প্রথম বন্ধুর বার্তার সাপেক্ষেই রিপ্লাই পাঠালাম, "কী? ইরফান?" তখনও কিন্তু আমি জানি না বাস্তবটা। সঙ্গে সঙ্গেই বুকের ভেতরটা ছ্যাঁত করে উঠেছিল। ইরফান খানের অসুস্থতার খবর আমি আগেই জানতাম। এবং আমার বন্ধুদের পাঠানো "না-বলা" বার্তার মাধ্যমেই জেনে গেলাম ইরফান আর নেই। দু-দিন আগেই তাঁর মা মারা গিয়েছেন, তিনি মায়ের শেষকৃত্যে যেতে পারেন নি – দেশের এই লকডাউন পরিস্থিতি (এই পরিস্থিতির অনেকটাই পরে উঠে আসবে আলোচনায় প্রাসঙ্গিকভাবে) এবং তাঁর নিজের অসুস্থতার জন্য। সঙ্গে সঙ্গে ইন্টারনেটে সংবাদ মাধ্যমের সাইট খুলে ওই হেডলাইনগুলো পেলাম – যেগুলো প্রথমেই লিখেছি। ইরফান খান সর্বকালের সেরা অভিনেতাদের একজন হিসেবে ইতিমধ্যেই স্বীকৃতি পেয়েছিলেন। তার সাফল্যের বেশিরভাগটাই আমার পড়া বা শোনা কথা। আমি কেবল তাঁর অভিনীত "মকবুল" এবং "বিল্লু বার্বার" ছবিদুটো দেখেছি। এখন এই মন ভেঙে দেওয়া খবরের মধ্যে আমরা সংকেতনের কী কী সমস্যার মুখোমুখি হলাম সেগুলোর দিকে তাকানো যাক। শোকের মধ্যে কাউকে এসব কথা বোঝানো মুশকিল বা এক-প্রকার নিষ্ঠুরতা, তা জানি। কিন্তু তাও জ্বলজ্যান্ত দৃষ্টান্ত – এমনিই মনের ভেতরে এসে গেল তাই লিখে ফেললাম। আর মনে মনে ভাবলাম: মানুষ যখন এই রচনা পড়বেন তখন ইরফানের চলে যাওয়ার "শোক", জগতের নিয়ম অনুযায়ী অনেকটাই কমে আসবে তাঁদের মনে। তখন বুঝতে অসুবিধা হবে না – সংকেত কীভাবে আমাদের মনের ভেতরে প্রতিক্রিয়া করে।

এই যে ইরফানের মৃত্যুর বাস্তবকে আমি বা আমার মতোই অনেকে উপলব্ধি করলেন তা কি প্রত্যক্ষজাত উপলব্ধি? আমরা কি তাঁর মৃত্যুকে স্বচক্ষে দেখে শোক প্রকাশ করছি? না করছি না। করছি সংবাদ মাধ্যমের "নিউজ হেডলাইন" এবং পরে বিস্তারিত খবরের মধ্যে দিয়ে। শুধু তাই নয়, আমার মতোই অনেকেই এই খবর প্রথমে জেনেছেন তাঁদের বন্ধুদের কাছ থেকে। এবং আমার জানার নমুনা তো আপনাদের কাছে প্রথমেই পেশ করেছি। সেই দুটো বার্তার কোথাও সরাসরি বলা ছিল না যে "ইরফান আর নেই"। খবরের কাগজে আছে। এই ধরনের খবরের শিরোনাম খবর দেখার আগেই আমি প্রত্যাশা করছিলাম – "অকালে চলে গেলেন প্রতিভাবান অভিনেতা ইরফান খান" এইরকমই বার্তা দেওয়া থাকবে হয়তো সংবাদের শিরোনামে। হুবহু মেলে নি প্রত্যাশা, অন্তত আমি যে দুটো খবরের সাইট খুলেছিলাম তার ভিত্তিতে। কিন্তু আমার দেখা প্রথম শিরোনামে তাঁর "অকালে চলে যাওয়ার" সমতুল তথ্য রয়েছে, "বয়স হয়েছিল ৫৩ বছর" এই অভিব্যক্তির মধ্যে। কিন্তু কাগজওয়ালারা তাঁর ক্যানসার বিধ্বস্ত জীবনের খবর জানতেন – তাই নিয়ে লেখালিখিও হয়েছে বিস্তর। সেই জন্যই তো দ্বিতীয় শিরোনামে "লড়াই" শব্দটার উল্লেখ আছে। এখন আমার মনে এই মর্মান্তিক ঘটনা যে-ভাবে ছায়াপাত ঘটালো সেটা বাস্তবের প্রত্যক্ষের মধ্যে দিয়ে আসে নি। প্রাথমিক ভাবে এসেছে বন্ধুদের "না-বলা" বার্তার ভেতর দিয়ে। আমার ওই বার্তা থেকে এক-মুহূর্তে বাস্তবের একবারে মধ্যে গিয়ে উপস্থিত হওয়ার মধ্যে রয়েছে ইরফানের অসুস্থতার পুরোনো ইতিহাস। সে-ইতিহাস যদি আমার জানা না থাকত – তাহলে আমাকে খবরের কাগজের বা সাইটের বর্ণনামূলক শব্দমালার জ্ঞান হওয়া অবধি অপেক্ষা করতে হত। এবং সেই শব্দমালার অভিব্যক্তির ওপরে নির্ভর

করেই তৈরি হত আমার মনের প্রতিক্রিয়া। বন্ধুদের ওই “না-বলা” অসমাপ্ত কমিউনিকেশনের মধ্যে আমি কোনো মানে খুঁজে পেতাম না।

এটা গেল একরকম সমস্যা। আমি বাস্তবে না থেকেও বাস্তবের অংশীদারিত্ব পালন করছি বার্তা বা তথ্যের মাধ্যমে। সর্বোপরি আমার পূর্ববর্তী জ্ঞান বা অভিজ্ঞতার সূত্রে আসা অনুমানের মাধ্যমে। সেই তথ্য নির্মিত হচ্ছে আমার আর বাস্তবের মধ্যে একটা ভাষিক পরিসরে। এবং সেই পরিসরেরও কত রকম ফের। এবার হচ্ছে বাস্তবের দ্বিতীয় ব্যাখ্যা। ইরফানের খবরটা শোনামাত্রই আমাকে একজন দেখালেন আরও একটা নিউজ হেডলাইন: “মৃত্যুর সঙ্গে লড়ছেন অমিতাভ বচ্চন।” এমনিতেই সারা বিশ্বজুড়ে এইরকম অসহায় পরিস্থিতি (করোনা বিষয়ক পরিস্থিতির কথা বলছি, যেখানে বিশ্ববাসীর অধিকাংশই গৃহবন্দী এবং অনিশ্চিত এবং তার ফলশ্রুতিস্বরূপ হতাশাগ্রস্থ) – তার মধ্যে এমন সব খবর! অথচ একইসঙ্গে দেখতে পাচ্ছি অমিতাভ বচ্চন, ইরফানের মৃত্যুতে গভীর শোকপ্রকাশ করে ট্যুইট করেছেন। যিনি আমাকে “মৃত্যুর সঙ্গে লড়ছেন অমিতাভ বচ্চন” খবরটা দেখিয়েছিল – তিনি কিন্তু এখনও বাস্তবের ওইদিকে বাস করছেন। অথচ আমি ফিরে এসেছি আরেক দিকে। কারণ তার জ্বলজ্যান্ত প্রমাণ আমার হাতে। খবরটা আসলে ভুয়ো। আগে খবরের কাগজে সকালবেলায় মানুষ জেনে নিত গতকাল অবধি কী কী ঘটনা ঘটল, রাজ্য-দেশ-বিশ্বজুড়ে। সেখানে ভুয়ো খবর যাচাই করারও সুযোগ বেশি ছিল গণমাধ্যমের হাতে। এখন একটা মোবাইল ডিভাইসের স্ক্রিনে একই আসল এবং ভুয়ো খবর পাচ্ছেন মানুষ। এক-একটা তথ্য-প্রযুক্তি সংস্থার কাজই হল, যেখানে যা খবর হচ্ছে সত্যি-মিথ্যা যাচাই না করে, মানুষের খবর দেখার প্রবণতা কৃত্রিম বুদ্ধিমত্তার সাহায্যে সেগুলোকে জড়ো করে উপস্থাপিত করা। এগুলোকে যে উপস্থাপনও বলে না সেকথা ক্রমশ জানতে পারব। এগুলোই এখনকার “বাস্তব”। কিন্তু বাস্তবের মধ্যেও গণ্ডগোল। আমি আসলে যে-খবরটাকে ভুয়ো বলে বিবেচনা করলাম সেটা পুরোটা ভুয়ো নয়। হেডলাইনে পুরো কথাটা লেখা ছিল না। ওইটুকু শব্দমালাই ছিল হেডলাইন। খবর যাতে পাঠককে চট করে আকর্ষণ করে – সেইজন্য কাগজওয়ালারা নানান কৌশলে খবরের হেডলাইন বানান। অমিতাভ বচ্চনকে নিয়ে পুরো কথাটা ছিল এই – “মৃত্যুর সঙ্গে লড়ছেন অমিতাভ বচ্চন, চিকিৎসকের ঘোষণায় কী প্রতিক্রিয়া হয়েছিল জয়ার”। এবং এই খবরটা আসলে **১৯৮২** সালে “কুলি” সিনেমার শুটিং চলাকালীন অমিতাভ একবার আহত হয়েছিলেন, এবং তার পরপরই আক্রান্ত হয়েছিলেন নিউমোনিয়ায় - বিষয়ে। সুতরাং খেয়াল করে দেখলেই বোঝা যাবে একটা অসমাপ্ত বাক্য, আংশিক শব্দমালা, একটা শব্দ, একটা নাম, ইত্যাদি নানান টুকরো টুকরো সংকেত কীভাবে আমাদের মধ্যে কাজ করে, এবং আমাদের বাস্তবকে রচনা করে। এই খবরটা আক্ষরিক অর্থে ভুয়ো বলা না-গেলেও, ভুয়ো খবর ভুরি-ভুরি পরিবেশিত হয় সোশ্যাল মিডিয়ায়। **২০১৬** সালেই তো, <“প্রয়াত হলেন অমিতাভ বচ্চন”...স্যোসাল মিডিয়ায় ফের মৃত্যু গুজবের শিকার বিগ বি!> এইরকম একটা ঘটনা ঘটেছিল। কোনো এক সংবাদ মাধ্যম এই নিয়ে সাফাই গেয়েছে: “অতি দ্রুততার সঙ্গে আপনার কাছে খবর পৌঁছে দেওয়ার সময়েও আমরা খবরের সত্যাসত্য সম্পর্কে সচেতন। সেই জন্যই যে কোনও ‘খবর’ পাওয়ার পর, তার সম্পর্কে নিশ্চিত হয়ে তবেই আমরা তা প্রকাশ করি। ফেক নিউজ বা ভুয়ো খবরের রমরমার সময়ে এটা আরও বেশি জরুরি হয়ে উঠেছে।”

তাহলে আমরা বাস্তবের কী কী জিনিস দেখতে পেলাম। এক পেলাম; বর্ণনার মাধ্যমে সত্যি ঘটনা যা বাস্তবে ঘটেছে, দুই হচ্ছে; আংশিক বা অসমাপ্ত বার্তার মধ্যে থেকে পাওয়া সত্য ঘটনা, যা বাস্তবে ঘটেছে, তিন হচ্ছে;

আংশিক বা অসমাপ্ত বার্তার মধ্যে দিয়ে কালের পরিপ্রেক্ষিতে অপ্রাসঙ্গিক সত্য ঘটনা, যা একসময়ে ঘটেছিল, চার হচ্ছে ভুয়ো খবরের মধ্যে দিয়ে তৈরি হওয়া বাস্তব, যা আসলে ঘটে নি। কিন্তু এসবের মধ্যে সংকেতের কাজ কী? এই যে "বাস্তব" বলছি, সে তো সংকেত দিয়েই তৈরি। মানুষের যে বাস্তব সে তো সংকেতেরই বাস্তব।

২. সংকেতের বাস্তব ও পরিভাষার সমস্যা

ভাবতে অবাক লাগে, আমাদের পরিচিত জগতটা সম্পূর্ণ সংকেত দিয়ে তৈরি। শুধু আমাদের কেন, প্রাণীজগতের সমস্ত প্রাণী (এমনকি উদ্ভিদ বললেও অত্যুক্তি করা হয় না) নিজের নিজের কৌমের মধ্যে, বা অন্য কৌমের সঙ্গে যোগাযোগ বজায় রাখে এই সংকেতের মাধ্যমে। এইসব সংকেতগুলো হয় খুব প্রাকৃতিক ভাবে তৈরি হওয়া, নইলে সাংস্কৃতিক ভাবে গড়ে ওঠা। প্রাকৃতিক ঘটনাও সংকেত হিসেবে যখন কাজ করে তখন তা মানুষের বোঝাপড়ার সাপেক্ষেই করে। সুতরাং সেই অর্থে প্রাকৃতিক সংকেত কথাটাই হয় না। মানুষ অন্যান্য স্তন্যপায়ী প্রাণীদের থেকে আলাদা এক নিজস্ব পরিচিতির জগত তৈরি করতে পেরেছে – তার নিজস্ব সংকেতন প্রক্রিয়ার মধ্যে দিয়ে। কীভাবে পেরেছে - সেটা তর্ক সাপেক্ষ ব্যাপার এবং সেই তর্কটা তোলা হয় মানুষের বিবর্তনবাদী ব্যাখ্যায়। কিন্তু এই রচনায় সেই তর্ক তোলার প্রয়োজন কম। বরং এই রচনায় মনোযোগ দেওয়ার কথা কীভাবে মানুষ নিজের মতো করে, তৈরি করে নিয়েছে তার পরিচিত জগতকে, কীভাবে সে অর্জন করেছে জ্ঞান! তবে মানুষের ক্ষেত্রে যে প্রাকৃতিক সংকেতের জগতটাকে ছাপিয়ে গেছে তার নিজের তৈরি করা সাংস্কৃতিক সংকেতের জগত, সেটা একটা দৃষ্টান্ত দিয়ে বলি। হিসেবটা মামুলি, কিন্তু মনে রাখা বাঞ্ছনীয়। "আকাশে মেঘ করা" একটা সংকেত - তার মানে "বৃষ্টি হতে পারে"। যদি বৃষ্টি হয় তাহলে বলতে হবে "মেঘ করা" সংকেতের সরাসরি ফলস্বরূপ "বৃষ্টি হওয়া"। কোন মেঘে বৃষ্টি হবে আর কোন মেঘে বৃষ্টি হবে না – সেসব কথাও নাকি পশু-পাখিরা টের পায়। অর্থাৎ তারা তাদের বোঝাপড়ার ক্ষেত্রে ওই প্রাকৃতিক সংকেতের কথা জানে এবং বিশেষভাবেই জানে। প্রাকৃতিক সংকেত তার মানে নিজেও একটা ঘটনা যা আর-একটা ঘটনার সংকেত। যেমন, "গুমোট গরম" মানে নিশ্চয়ই আকাশে "মেঘ আছে" বা "সোঁদা গন্ধ" ভেসে আসা মানে নিশ্চয়ই কোথাও "বৃষ্টি হচ্ছে"। কিন্তু এই প্রাকৃতিক সংকেতও মানুষ বা প্রাণীর ক্ষেত্রে অভিজ্ঞতার মধ্যে দিয়ে অর্জিত হয়। সেখানে কার্য-কারণকে একসূত্রে বাঁধে প্রাণীরাই। "ঘর পোড়া গোরু সিঁদুরে মেঘ দেখলে ডরায়" - এই প্রচলিত কথাটার মানে হচ্ছে - যে গোরুর ঘর পুড়ে গেছে, সে ওই "আগুনের রঙ"-কে "ঘর পোড়া"-র সংকেত হিসেবে চেনে। এবং তার ঘর পুড়ে যাওয়ার অভিজ্ঞতায় সে "সিঁদুরে মেঘ" অর্থাৎ যে মেঘের রঙ "আগুনের রঙ"-এর সমতুল - সেই মেঘ দেখলে গোরুর পূর্ব-অভিজ্ঞতাজনিত ভয় হয়। এই সংকেত এবং তার ফলস্বরূপকে সে জেনেছে তার অভিজ্ঞতার মধ্যে দিয়ে। হতে পারে সে ভুল ভাবছে, কারণ "সিঁদুরে মেঘ" সত্যিই তার ঘর পোড়াবে না। কিন্তু ঘর পুড়ে যাওয়ার অভিজ্ঞতা তাকে ওই বিশেষ রঙের সঙ্গে এক বিপদের সম্পর্ককে কার্য-কারণ সূত্রে বেঁধে দিয়েছে। মানুষের ভাষার মজাটা হচ্ছে এই যে, সে এই পুরো সংকেতন প্রক্রিয়াটাকেই আস্ত একটা সংকেত হিসেবে ব্যবহার করতে পারে। যেমন, একজন ব্যক্তি তাঁর অভিজ্ঞতা থেকে জানেন দেশে অর্থনৈতিক অবনমন ঘটলে বেকারত্ব বাড়ে, শুধু তাইই নয়, তিনি নিজেও হয়তো কর্মচ্যুত হবার শিকার। দেশের সাম্প্রতিক অর্থনৈতিক অবনমনের ঘটনায়, তিনি আশঙ্কা প্রকাশ করছেন দেখে তাঁর পরিচিত কেউ তাঁকে সান্ত্বনা দিচ্ছেন। যাঁর বেকারত্বের অভিজ্ঞতা আছে, বেকারত্বের জ্বালা যিনি বোঝেন, তিনি তখন ওই প্রবাদ আওড়াতে পারেন যে "আমি ভাই ঘর পোড়া গোরু, সিঁদুরে মেঘ দেখলে ডরাই।"

শুধু প্রাকৃতিক সংকেত নয় সামাজিক তথা সাংস্কৃতিক সংকেতও – অভিজ্ঞতার মধ্যে দিয়েই সঞ্চারিত হয় মানুষের থেকে অন্য মানুষে। তবে সে-ক্ষেত্রে কখনো-বা নতুন সংকেত নির্মাণের সংকল্পও মানুষের থাকতে পারে। প্রাকৃতিক সংকেতের সঙ্গে সামাজিক বা সাংস্কৃতিক সংকেতের এইটুকুই যা তফাৎ।

মানুষের পরিচিত জগত যে-সংকেত দিয়ে তৈরি তার ব্যাখ্যা দেওয়া বা দৃষ্টান্ত দেওয়া বেশ মুশকিলের। একটা কথা এদিক-ওদিক করেছেন কি বিপাকে পড়বেন! সঙ্গে সঙ্গে অন্য কথারা এসে বলবে, আমাদের তুমি বাদ দিচ্ছো কোন সাহসে? আবার আপনি যদি সব-কথা বলেন, তাহলে সেইসব কথার অনেকেই বলবে - তুমি সবকিছুতেই আমাদের টেনে আনো কেন? আমাদের কি বিশ্রাম নেবার জো নেই? কেন এইসব মুশকিল আমাদের সামনে এসে দাঁড়ায়, সেইটাই এই রচনার উপজীব্য। সংকেত-বিষয়ক নানান ভাষ্য আমাদের নানা-কারণে পড়তে হয়েছে। ভাষাতত্ত্বের ছাত্র হিসেবে তো কিছু ভাষ্যের খণ্ডিত কিছু অংশবিশেষ অবশ্যপাঠ্যরূপেও গ্রহণ করতে হয়েছে। কিন্তু সেইসব পাঠেও যে বিস্তর মুশকিল ঢুকে বাসা বেঁধেছিল তার কথা বুঝতে অনেক সময় লেগে গেছে। সংকেতের এই গোটা বিশ্বটাই যে আসলে এক ধাঁধা বা পরস্পরবিরোধীতায় ভরা – সময় লেগেছে সেটা বুঝতে। একটা দৃষ্টান্ত দিই। আমি যে মুশকিলের কথা তুলছি - সেই মুশকিলকে ব্যাখ্যা করব কীভাবে তার পথ খুঁজে পাই নি এখনও। রলাঁ বার্তের গুটি-কয়েক বই আমি পড়েছি। আমি ফরাসী জানি না, ইংরিজি অনুবাদে পড়েছি ওই বইগুলো। এই পাঠেও মুশকিল জমা হয়েছে পরতে-পরতে।

যেমন, প্রথমত, ভাষাতেও সংকেত সদা-সর্বদা সর্বত্র একই ভাবে সংকেতক-সংকেতিতর একগামী সম্পর্কের কথা বলে না। দ্বিতীয়ত, ভাষা মানে যদি মৌখিক ভাষা হয়, তাহলে লেখার ক্ষেত্রে সংকেতায়ন প্রক্রিয়া আবার নতুন মোড় নেয় - সেকথা বলাই বাহুল্য। তৃতীয়ত; সেই একের পর এক সংকেতায়নের জটিল হিসেব-নিকেশ যখন ভাষ্যকার তাঁর নিজের ভাষায় ব্যাখ্যা করবেন তখন ওই একই ভাষার পাঠক সেই জটিল হিসেব-নিকেশের খানিকটা আঁচ পাবে এবং নিজেও ওই ভাষার প্রতিষ্ঠানে জন্ম নেওয়া অস্তিত্ব হিসেবে সেই জটিল বহুমুখী হিসেব-নিকেশের ব্যক্তি-কেন্দ্রিক ভাষ্য তৈরি করে নেবে। সে ভাষ্য তাঁর একান্ত ব্যক্তিগত। চতুর্থত; যিনি ইংরিজি অনুবাদ করবেন তিনি আবার তাঁর নিজের ভাষা ইংরিজির প্রাতিষ্ঠানিক বৃত্তের সমস্ত অনুশাসনে অভ্যস্থ – সেখানে সংকেতায়নের ফরাসী ভাষ্য বা ভাষ্যসমুহকে টেনে আনতে গেলে একটা ফাঁক তো থেকেই যাবে। বাংলার বুদ্ধিজীবী মহলে খুব প্রচলিত একটা দৃষ্টান্ত হচ্ছে - সাবলটার্নের বাংলা পরিভাষার রকমফের। "সাবঅলটার্ন" নিজেও একটা অনূদিত শব্দ। ইতালীয় "সুবলতের্নো" থেকে "সাবঅলটার্ন" কথাটা এসেছে ইংরিজিতে। যদিও ইতালি রোমান্স আর ইংরিজি জার্মানিক ভাষাবর্গের ভাষা। এবার সাবঅলটার্নের জনপ্রিয় বাংলা প্রতিশব্দ "নিম্নবর্গ"-তে অনেকেরই আপত্তি। কারণ "নিম্নবর্গ" কথাটা অনেক বেশি সরলীকৃত। কেউ তার বাংলা করেছেন, "সিপাহী," আবার রাশিয়ানরা যে অর্থে সাঅবলটার্নের পরিভাষা ব্যবহার করেছেন তার বাংলা করলে দাঁড়ায় "পল্টন"। সমস্যাটা কোথায়? সমস্যাটা ওই নিজের ভাষায় যখন অন্য ভাষায় ব্যবহৃত কোনো ধারণার অনুবাদ করবো সেটা "এর মানে ওটা" এইরকম সহজ সমীকরণে সবসময় বাঁধা পড়বে না। সমীকরণের মাঝখানে এসে হাজির হবে গোটা ভাষার বর্তমান প্রশাসন এবং ইতিহাস। পঞ্চমত; তাহলে আমরা যখন বাংলা ভাষায় ফরাসী ভাষ্যকারের ভাষ্য পড়ব - অন্তত আমার ক্ষেত্রে এবং আমার মতো অনেকের ক্ষেত্রে সেটা শুধু ভাষাগতভাবে "ভাষ্যের (ফরাসী) ভাষ্যের (ইংরিজি) ভাষ্য (বাংলা)" - হয়ে উঠবে তাই-ই নয়, তার ওই সমীকরণের মধ্যে গড়ে উঠবে সংকেতায়ন প্রক্রিয়ার অজস্র বহুমুখী হিসেব নিকেশ।

এই যেমন প্রথম থেকে যে সংকেত সংকেত বলে চলেছি – সেই সংকেত কী? কী-টা এই ধরনের অধিবিদ্যাচর্চায় অনেক সময়েই পাঠকরা তাদের ঔপনিবেশিক স্মৃতি উসকে জেনে নেবার চেষ্টা করেন ইংরিজি প্রতিশব্দ দিয়ে। কারণটা খুব সহজ। এই বর্তমান অধিবিদ্যাচর্চার (আমি অভিনব গুপ্তের ভাষ্য বাদ দিচ্ছি। কেন সেটা বলবার সময় কম। বুঝে নিন বলাই ভালো) শুরুটা ওদেরই হাত ধরে। আর না-হলে আমাকে যদি অভিনব গুপ্তের পথ অবলম্বন করতে হয়, তাহলে প্রথম থেকে আমার ভাষ্যে ব্যবহৃত প্রতিটা প্রতিশব্দের সংজ্ঞা ও ব্যাখ্যা দিতে দিতে এগোতে হয়। অথচ আমি তো বলছি 'সাইন'-এর কথা, যার বাংলা করা হয়েছে 'সংকেত', এই প্রতিশব্দও আমার বানানো নয়। ফলে সবদিকেই বিপদ।

এই সব দিক খতিয়ে দেখলে বোঝা যায় যে আমি যখন সংকেত-ভাষ্যকারদের কথা আপনাদের কাছে ব্যাখ্যা করতে বসেছি তখন আমি কেবল আমার উলটো দিকের আপনার তরফেই অসীম ভাষ্য-জন্মাবার সম্ভাবনা তৈরি করছি না - আমি নিজেও আসলে একটা পৃথক ভাষ্যই রচনা করছি। এই রচনা সেইদিক দিয়ে: 'সংকেত'-এর বহুমুখী সম্ভাবনার নানান ভাষ্য তুলে ধরা, অর্থাৎ সেসবের তাৎক্ষণিক ভাষ্য রচনা করতে থাকা। এবং সেইসব ভাষ্যের সঙ্গে সম্বন্ধ আছে এমন সমস্ত বিষয়ের কথা বলা।

ভাষার যদি পুরোটাই সংকেত দিয়ে তৈরি হয়, তাহলে সংকেতের কথা ভাবতে গেলেও তো সংকেত লাগে। তার মানে এই ক্ষেত্রে সংকেত স্ব-ব্যাখ্যাত। অর্থাৎ সে নিজেকে নিজেই ব্যাখ্যা করতে পারে। এখন প্রশ্ন উঠতে পারে ভিন-ভাষার পাঠক কি তাহলে কখনো অপর ভাষায় লেখা আদি রচনা বা অরিজিনাল টেক্সটের নাগাল পাবেন না? এই সূত্রে আমার একটা গুরুত্বপূর্ণ কথা মনে পড়ে গেল। আমার একজন সিনিয়র, তিনি মার্কস নিয়ে আলোচনা করতে গিয়েছিলেন একজন মার্কসীয় পণ্ডিতের কাছে। ওই পণ্ডিত আমার ওই দাদাটিকে বলেছিলেন আগে জার্মান শিখে এসো, তারপর মার্কস প'ড়ো। এটা একটা সমস্যা বটে। ধরা যাক, গায়ত্রী চক্রবর্তী স্পিভাক যখন দেরিদা প্রথম পাঠ করলেন তখন তিনি তো ফরাসী ভাষাতেই করলেন। এখন গায়েত্রী সেটাকে ইংরিজিতে অনুবাদ করতে গেলেন কেন? তার কারণ তো এই-ই যে যাতে সেই রচনা বিশ্বজনীনতা পায়। এই সেতুবন্ধনের কাজ যেমন সমস্যাজনক বলে বলতে শুরু করেছি তেমনই আবার এও বলছি ওই সেতু বাঁধার কাজটা জরুরিও বটে। কারণ ওই ইংরিজি অনুবাদ না হলে দেরিদার নতুন নতুন ভাষ্য তৈরি হবে কী করে। আজকের যে মার্কসকে আমরা পাই, সে কি একমেদ্বিতীয়ম? মোটেই না। বরং তা থেকে বহু শাখা-প্রশাখা বেরিয়ে নানান ভাষ্যের মধ্যে দিয়ে সেই মার্কসের কাছে পৌঁছতে হয় পাঠককে। এইটাই পাঠের সার্থকতা। এবং অনুবাদেরও। দেখুন এই পরিভাষা দিয়ে আলাদা ভাষ্য তৈরি হওয়ার ঘটনাটা কতটা গুরুত্বপূর্ণ। গ্রামশির "প্রিজন নোটবুকস" পরবর্তীকালে যে মার্কসবাদের নতুন ব্যাখ্যা দেওয়ার কাজ শুরু হল, এমন কি আমাদের দেশেও তার বেশ কয়েক দশক পরে মার্কসিস্ট স্কুল হিসেবে সাবঅলটার্ন স্টাডিজের জন্ম হল সেও কিন্তু সেই নতুন পরিভাষা তৈরির মধ্যে দিয়েই হল। মুসোলিনির কারাগারে বন্দী গ্রামশি তাঁর নজর এড়িয়ে মার্কসবাদী চর্চা চালিয়ে যাবেন বলে - মার্কসবাদকে প্র্যাক্সিসের দর্শন, প্রলেতারিয়তকে সুবলতের্নো ইত্যাদি নাম দিলেন। এই যে কল্পনা ও বাস্তব অবস্থার পরিপ্রেক্ষিতে নতুন ভাষ্য পেলাম সেও তো থেমে থাকল না। তারও নানান ভাষ্য রচনা হল দিকে দিকে। যেমন একটা ভাষ্যের পরিপ্রেক্ষিতে তৈরি হয়েছিল সাবঅলটার্ন স্টাডিজ।

বুদ্ধিমান পাঠক মাত্রেই প্রশ্ন তুলবেন, আমি কোন তরফে কথা বলছি? বিজ্ঞানের তরফে না মানবিক বিদ্যার তরফে না সমাজবিজ্ঞানের তরফে? কারণ বিজ্ঞান ওরফে প্রাকৃতিক বিজ্ঞানের ক্ষেত্রে এই ভাষ্য রচনার তত্ত্ব কতটা কাজে লাগবে? কারণ প্রাকৃতিক বিজ্ঞানের লক্ষ্যবস্তু হচ্ছে প্রাকৃতিক জগত আরও নির্দিষ্ট করে বললে বস্তুজগত। বস্তুজগতও নিয়ত পরিবর্তনশীল। কিন্তু তা সত্ত্বেও একই সময়ে দাঁড়িয়ে কোনো বস্তুর বিবরণ যদি কোনো ভাষায় দেওয়া হয় তখনও কি অপর কোনো ভাষার পাঠক তাঁর নিজের ভাষায় অনুবাদের মাধ্যমে ওই বিষয় সম্বন্ধে জ্ঞান অর্জন করতে পারবে না?

পাঠক কিছু মনে করবেন না, এখানে আমাদের দেখতে হবে সংকেতায়ন প্রক্রিয়ার দিকে। সব সংকেতের চরিত্র যে একরকম নয় একথার ব্যাখ্যা আপনাদের কাছে দিতে হবে। আরও একবার সেই মান্ধাতা আমলের সংজ্ঞাগুলোকেই নতুন নজরে পৌঁছে দিতে হবে। বিশ্বজনীন বলে কিছু হয় না - একথা শিরোধার্য করে নেওয়াও একধরনের গোঁড়ামি। সেই কারণে সংকেততত্ত্বের পাঠ অনেকক্ষেত্রেই ভাষ্য-ভেদে বিভ্রান্তিকর। তাই প্রথমেই সমস্যার ক্ষেত্রগুলোকে চিহ্নিত করতে না-পারলে সংকেততত্ত্বের আলোচনাতেও যেমন, অসম্পূর্নতা থেকে যাবে তেমনই অন্যান্য জ্ঞানচর্চার ক্ষেত্রেও ভাষায়-ভাষায় সেতু বাঁধার কী কী উপকরণ লাগবে সেসব প্রশ্নেরও কোনো সদুত্তর পাওয়া যাবে না। কথাগুলো কেন এইভাবে তুলছি তার দৃষ্টান্ত আগেই দিয়েছি, সাবঅলটার্ন স্টাডিজের উদ্ভবের প্রসঙ্গে এবং তার বাংলা তর্জমার সমস্যার কথা তুলে সেই তর্জমা থেকে এই রচনাকে মুক্ত করেছি। বেশ কিছু ধারণার ক্ষেত্রে যে-জিনিস যেভাবে যে-প্রসঙ্গে ব্যবহৃত হয়েছে তার আক্ষরিকতা একমাত্র সেই পরিপ্রেক্ষিতেই সম্ভব। যেমন, এ-কথা সকলেই প্রায় জানেন স্বয়ং রবীন্দ্রনাথ 'নেশন' কথাটার অনুবাদ করেন নি। কিন্তু 'নেশন কী' তার ব্যাখ্যায় বাংলা ভাষাতেই এক অনতিদীর্ঘ আলোচনা করেছেন। এই সূত্রে মনে পড়ে যায় কলকাতা বইমেলায় এক কথা প্রসঙ্গে গায়ত্রী ওই সাবঅলটার্নের বাংলার মতোই নভেলের বাংলা "উপন্যাস" করতে চাননি। কিন্তু বস্তুজগতের ক্ষেত্রে এই কথাটা অনেক বেশি শিথিল। আকাশ, জল, মাটি - এসব সব দেশে সব কালে এক – ধরে নিলে খুব সমস্যা হয় না। কিন্তু সেই সঙ্গে এও মনে রাখতে হয়, কেমন মাটি - এঁটেল মাটি, কেমন মেঘ - জলভরা মেঘ, কী পাখি - খঞ্জনা। বিজ্ঞানের কাজের সুবিধাও আছে কিছু। যেমন, বৈজ্ঞানিকরা খুঁজে পেতে ওই খঞ্জনা পাখি, যাচাই করে দেখেছেন, এবং ইংরিজিতে তার নাম দিয়েছেন, White wagtail, হোয়াইট ওয়াগটেল। প্রথমত; কিছু নাম রয়েছে যেগুলো স্ব-বর্ণনামূলক মানে শেলফ-ডেসক্রিপটিভ। যেমন, গুগুল মারফত অক্সফোর্ড অনলাইন অভিধান জানাচ্ছে: ওয়াগটেল মানে হচ্ছে: a slender Eurasian and African songbird with a long tail that is frequently wagged up and down, typically living by water। অর্থাৎ 'frequently wag'-এর কারণেই তার নাম দেওয়া হয়েছে ওয়াগটেল। সুতরাং এ-ক্ষেত্রে নামের অবাধত্বের তত্ত্ব (থিওরি অফ আর্বিট্রারিনেস) কার্যকরী নয়। এক্ষেত্রে গাছকে দ্রিঘাংচু বলে ডাকা নিষেধ। আর বিজ্ঞানের কাজের আর একটা যে বড় দিক - বর্গীকরণ বা ট্যাক্সোনমি। তাকে দরকার হলে কোনো কোনো ক্ষেত্রে ফিরিয়ে আনতে হবে। না-হলে খঞ্জনা নামক ওই বিশেষ প্রজাতির পাখির বিশ্বজনীন পরিচয় দেওয়া সম্ভব হবে না। ট্যাক্সনমি সচল বলেই - বিজ্ঞানের ভাষা বলে দিতে পারে ওই পাখি মোতাসিলিদে পরিবারের মোতাসিলা গণের এম. আলবা প্রজাতির (Motacillidae, Motacilla, M. alba) সদস্য। স্রেফ ইংরিজি নামের ক্ষেত্রেও দেখুন ওয়াগটেল হচ্ছে গণ। তার ভেতরে অনেক প্রজাতি রয়েছে ওয়েস্টার্ন ইয়েলো ওয়াগটেল, ইস্টার্ন ইয়েলো ওয়াগটেল, মাউন্টেন ওয়াগটেল, গ্রে ওয়াগটেল, (Western yellow wagtail, Eastern yellow wagtail, Grey wagtail, Mountain wagtail)

ইত্যাদি। ইংরিজিতে দু-রকম শব্দ দিয়ে ট্যাক্সনমির একটা কাজ আংশিকভাবে করে নেওয়া যায়। শব্দদুটো হল, হাইপারনিম (hypernym বা হাইপারোনিম (hyperonym)) আর হাইপোনিম (hyponym)। হাইপারনিম হাইপোনিমের ওপরের বিন্দু বা নোড। যেমন, হাইপারনিম হল 'গাছ' আর হাইপোনিম হল নিমগাছ, আমগাছ, ইত্যাদি। আবার নিমগাছও হাইপারনিম হতে পারে। তখন তার হাইপোনিম হবে, ঘোঁড়ানিম, বুনোনিম, গৃহস্থ নিম, ইত্যাদি।

কিন্তু প্রাকৃতিক বিষয় নিয়েও সমস্যা আছে। যেমন টুয়াইলাইট-কে গোধুলি বললে সম্পূর্ণ বলা কি হল? নাকি রবীন্দ্রনাথের গান, গোধূলি গগনে মেঘে ঢেকেছিল তারা-র মর্ম টুয়াইলাইটের মধ্যে দিয়ে উদ্ধার করা সম্ভব? আবার দেখুন এস্কিমোরা বরফের নানান প্রকারভেদ সম্বন্ধে যতগুলো শব্দ জানে আমাদের বরফ, তুষার বা শিলা দিয়ে কি সেই সমস্ত শব্দের ব্যাখ্যা দেওয়া সম্ভব? যে-কারণে ভাষাতাত্ত্বিক আপেক্ষিকতা বা লিঙ্গুইস্টিক রিলেটিভিটির প্রসঙ্গ উঠে এসেছিল স্যাপির-হোয়র্ফের কাজে।

এদিকে এই ট্যাক্সনমি তো অন্যান্য বিদ্যার ক্ষেত্রে বিশেষত বিজ্ঞান-ভিন্ন অন্যান্য বিদ্যার ক্ষেত্রে সবসময় সম্ভবও নয়। যেমন, ধারণা যদি কনসেপ্ট হয়, তাহলে আইডিয়া কী। আইডিয়াল যদি আদর্শ হয় তবেই বা আইডিয়া কী? আর স্ট্যান্ডার্ডই বা কী? আবার ইউনিভার্সাল বোঝাতে বাংলায় কখনো বিশ্বজনীন, কখনো নির্বিশেষ, কখনো সামান্য ব্যবহার করা হয়। এই সমস্ত ক্ষেত্রগুলোতে তো ভাষাতাত্ত্বিক আপেক্ষিকতা দিয়ে সমলানো সম্ভব নয়। তাই এই সমস্ত নানা-বিদ্যার পরিভাষা নিয়ে পণ্ডিতদের মধ্যে তর্ক-বিতর্ক লেগেই থাকে। তাই এক্ষেত্রে আমার প্রস্তাব ভাষ্য রচনার সময় পাঠকের সামন্তরাল পাঠ বা প্যারালাল রিডিং-এর সম্ভাবনাকে জাগরুক রেখে চলা। অর্থাৎ একই সঙ্গে ট্যাক্সনমি এবং ভাষাতাত্ত্বিক আপেক্ষিকতাকে জিইয়ে রাখা। যাতে পাঠক একই সঙ্গে বিশ্বজনীন ও ভাষাতাত্ত্বিক আপেক্ষিকতার পাঠ নিতে পারে। এরপরেও সমস্যা থাকবে, কিন্তু নিঃসন্দেহে সেই সমস্যা কমবে। সংকেততত্ত্বের কাজ করতে গেলে এই সমান্তরাল পাঠের ক্ষেত্র তৈরির কথা মনে রাখা উচিত দুটো কারণে। এক, কোনো ভাষায় ব্যবহৃত পরিভাষা নিয়ে ওই পরিভাষা ব্যবহারকারী যা বলছেন তার ব্যাখ্যা (সংজ্ঞা নয়) বাংলাভাষায় দেওয়া ওই পরিভাষা বজায় রেখে। এবং ট্যাক্সনমির সম্ভাবনার কথা সমস্ত ক্ষেত্রেই তৈরি করে রাখা।

তাহলেই বুঝে দেখুন সংকেততত্ত্বের আপন ভাষ্য বাংলায় লিখতে গেলে কতরকমের সমস্যা! যদিও সেই-সব সমস্যার তোয়াক্কা না করেই এতদিন ধরে চলে আসছে সেই কাজ। থেমে থাকেনি। এটাও কম বড় কথা নয় কিন্তু! ভারতে এই ধরনের চর্চার আরও একটা দিক আছে - সেটা প্রাচীন ভারতীয় শাস্ত্র - যা বিমল মতিলালের কথায় একই সঙ্গে সাহিত্যতত্ত্ব, ব্যাকরণ এবং দর্শনের যোগফল। সেই চর্চা তার নিজের মতো করে করা যায়। যদিও বাংলাভাষায় সমস্যা হয় সংস্কৃত পরিভাষা নিয়ে। কিন্তু সেক্ষেত্রে সাংস্কৃতিক দূরত্ব কম হওয়ার ফলে ম্যানেজ করা যায় বেশ ভালোভাবেই। কেউ-কেউ পাশ্চাত্য দর্শনের বা অন্যান্য চর্চার সঙ্গে ভারতীয় চর্চার নানান বিষয়কে অভিন্ন করে ব্যাখ্যা করার চেষ্টা করেন - তাতে সমস্যা আরো বেশি জট পাকিয়ে যায়। কিন্তু এখন আরও বেশি সতর্ক হবার সময় এসেছে। এই সতর্কতা মেনেই এখনকার ভাষ্য রচনার কাজে হাত দিয়েছি আমি। সুতরাং বর্তমান রচনায় আমি বৈজ্ঞানিক রীতি মেনে স্ব-বিবরণমূলক বা শেলফ ডেস্ক্রিপটিভ পরিভাষা ব্যবহার করবার পক্ষপাতী।

কিন্তু কোথাও কোথাও আমি যাদের জ্ঞানচর্চার ক্ষেত্রে ভরসা করি, তাদের তৈরি করা পরিভাষাও ব্যবহার করব। অনেক ক্ষেত্রে বন্ধনীতে রাখব ইংরিজি বা ফরাসি শব্দের রোমান হরফে প্রকাশিত চেহারা।

তাহলে সংকেতের বর্তমান ভাষ্য: যেহেতু পৃথিবীতে সমস্ত সংকেতের কাজ হিসেবে তিনটে জিনিসকে চিহ্নিত করা যায়, কার্যের সঙ্গে কারণকে জুড়ে দেওয়া, নামকরণ করা, নির্দেশনা দেওয়া এবং ব্যাখ্যা করা। এবং এর মধ্যে কেবল ব্যাখ্যার ক্ষেত্রেই সংকেতের কাজ একাধিক ভাষার মধ্যে সেতু বন্ধের কাজ করা এবং সর্বতোভাবে সেতু বাঁধার জন্য ট্যাক্সনমি এবং ভাষাতাত্ত্বিক আপেক্ষিকতাকে গুরুত্বসহ বিবেচনা করা। এই কাজ করতে গেলে ভাষ্যকারকে আরও দুটো দিকে খেয়াল রাখতে হয় - এক হচ্ছে ভাষা-নির্বিশেষে (যদি ভাষ্যকার বহুভাষাবিদ হন) শব্দ বা ধরণার নিজস্ব সংস্কৃতি ও জ্ঞানের চৌহদ্দি (লৎমানের যে বাউন্ডারির ধারনা) সম্বন্ধে অবহিত থাকা দ্বিতীয়ত, তাঁর নিজের এবং পাঠকের সংস্কৃতি, জ্ঞান এবং অভিজ্ঞতার চৌহদ্দির মধ্যে দূরত্ব কমিয়ে আনা।

৩. সাধারণ ভাষাতত্ত্বের পাঠক্রম

আমি বর্তমান রচনায় সংকেতের যে ভাষ্য উপস্থাপন করছি - তা অনেকগুলো সংকেতভাষ্যের ওপর প্রত্যক্ষ এবং পরোক্ষভাবে নির্ভরশীল। প্রত্যক্ষ নির্ভরশীলতা যে ভাষ্যগুলোর ওপর সেগুলোর মধ্যে বিশেষত উল্লেখযোগ্য: **১৯৫৯** সালে প্রকাশিত ওয়েদ বাস্কিন (Wade Baskin) অনুদিত (ইংরিজি) 'কোর্স ইন জেনারেল লিঙ্গুইস্টিক্স'। সংকেতের প্রাথমিক পরিচিতি দিতে আমি দেখেছি **১৯৯৪**-এ প্রকাশিত থমাস অ্যালবার্ট সিবিঅকের লেখা বই 'সাইনস: অ্যান ইনট্রোডাকশন টু সেমিওটিক্স'। কিন্তু বেশি চেষ্টা করেছি সোস্যুরের বক্তৃতার ইংরিজি অনুবাদগুলোর ওপরেই ভরসা রাখতে।

সংকেততত্বের আলোচনার শুরুতেই যে কথাটা সবচেয়ে আগে উল্লেখ করে নিতে হয় - যে ইংরিজিতে সংকেতের সমস্ত ভাষ্য মূলত দুটো পর্যায়ে আলোচিত হয়ে এসেছে। এক, সোস্যুর-কথিত "সেমিওলজি" পরিভাষাটিকে কেন্দ্র করে যার বাংলা তর্জমা হিসেবে বেছে নিয়েছি সংকেততত্ত্বকে। আর একটা, পার্সের অনুসরণে "সেমিওটিক্স"-কে কেন্দ্র করে, যার বাংলা তর্জমা করা যায় "সংকেতবিজ্ঞান"। এই পরিভাষার ক্ষেত্রেও আমার ভেতরে কাজ করছে বাংলা ভাষায় ভাষাতত্ত্ব চর্চার পূর্বশর্তগুলো, ঠিক যেমনভাবে কোনো ভাষ্য রচনা করতে গেলেই ভাষ্যকারের অক্ষমতা ও অকর্মন্যতা সবচেয়ে বেশি করে প্রমাণিত হয় তেমনভাবেই। ভাষার নিজস্ব নিয়ম ও তার অনুশাসন কোনো ভাষ্যকারকেই সম্পূর্ণ নতুন পন্থায় কাজ করবার অনুমতি দেয় না। সর্বক্ষণ ভাষার পূর্বশর্তগুলো ভাষ্যকারকে শেকল দিয়ে বেঁধে রাখে - এ ঠিক তেমনই। এ-কথা যেমন উমবের্তো একোর ক্ষেত্রেও সত্যি তেমনই আমার ক্ষেত্রেও কার্যকর। অর্থাৎ আমরা যে ফোনেটিক্স আর ফোনোলজির পরিভাষা হিসেবে ব্যবহার করি - ধ্বনিবিজ্ঞান ও ধ্বনিতত্ত্ব। সেই বিধি মাথায় রেখেই সংকেততত্ত্ব আর সংকেতবিজ্ঞানের বিভাজন। তত্ত্ব পরসর্গ হিসেবে যোগ হলে সাধারণত বুঝে নিতে হয় ওই বিদ্যার ফাংশনাল বা বৃত্তিগত দিক। অর্থাৎ যে-দিকের সঙ্গে সরাসরি সমাজ ও সংস্কৃতি জড়িত। সে-ক্ষেত্রে সোস্যুরের প্রবর্তিত বিদ্যাকে সংকেততত্ত্ব বলার সার্থকতাও রয়েছে। আমরা জানি যে সোস্যুরের কাজে যাঁদের কাজের প্রভাব ছিল তাঁদের মধ্যে ফরাসী সমাজতাত্ত্বিক এমিলে দুর্খেইমের নাম উল্লেখযোগ্য। **১৮৯৭** সালে দুর্খেইমের কাজ 'সুইসাইড' নিয়ে। যেখানে দুর্খেইম দেখান "আত্মহত্যা একটা সামাজিক ঘটনা"। এই রকম সমান্তরাল উক্তি আমরা সোস্যুরেও পাই, যেখানে তিনি দেখান, "ভাষা একটা সামাজিক ঘটনা"।

ফলে সংকেততত্ত্ব পরিভাষা নিয়ে বিতর্কের অবকাশ কম। অথচ ভাষ্য হিসেবে পার্সের ভাষ্য অনেক বেশি মানবিকবিদ্যা নির্ভর, সেই মানবিকবিদ্যা-নির্ভরতা সোস্যুরের চেয়েও বেশি। তা সত্ত্বেও পার্সের ভাষ্যকে সংকেতবিজ্ঞান বলতে হবে - ভাবলে অস্বস্তি হয়। বরং সোস্যুরের বক্তৃতায় পাওয়া যায় যে, সোস্যুরই চেয়েছিলেন ভাষার বিজ্ঞানসম্মত এক ভাষ্য রচনা করতে। কিন্তু আমরা অপারগ। ভাষা-চর্চার শেকলে আমাদের হাত-পা বাঁধা। সুতরাং - যা যেমন আছে, সেটা বিবৃত করতেই - সেমিওলজিকে সংকেততত্ত্ব আর সেমিওটিক্সকে সংকেতবিজ্ঞান বলে ডাকা।

কিন্তু সংকেততত্ত্বের সামগ্রিক আলোচনায় - বর্তমানে যে ভাষ্য রচিত হতে থাকবে তাতে সোস্যুরের ভাষ্য নিয়েও কথা হবে। এবং সেই কথায় একদিকে যেমন সংকেতের সামাজিক বিশ্বের দিকে তাকানোর চেষ্টা করা হবে তেমনই চলবে মানবিকবিদ্যানির্ভর বিশ্লেষণের গুরুত্বের দিকে নজর দেওয়ার কাজও। সংকেতের নানান রকমের পরিচয় দেবার কাজে মোটামুটি অনুসৃত হবেন সিবিঅক (১৯৯৪) এবং সেই সঙ্গে চলবে পদে পদে তাঁর ভাষ্যের পরিমার্জন। যেমন তিনি আলোচনার শুরুতেই সংকেতের আলোচনাকে প্রাসঙ্গিক করতে গিয়ে সংকেতন বা সেমিওসিসের সংজ্ঞা দিয়ে বসছেন। বলছেল, যা সপ্রাণীবাচক অস্তিত্বগুলোকে অপ্রাণীবাচক বস্তুর থেকে আলাদা করে তা-ই সেমিওসিস। এবং এই সংকেতন প্রক্রিয়াকে তিনি সংকেত উৎপাদন এবং তার বোঝাপড়াকে জীবের সহজাত প্রতিক্রিয়াজাত সক্ষমতা হিসেবে দেখিয়েছেন।

সংজ্ঞা নির্ধারণ করা এই কারণে উভয়-সংকটের। করলেও বিপদ, না-করলেও সমস্যা। তাই ওই কাজে খুব সন্তর্পনে হাত দেবার কথা। আমরা ইতিমধ্যেই বলেছি - সংকেতের কাজ নানান রকম এবং এক-এক জায়গায় সংকেত এক-এক রকমভাবে কাজ করে। কোথাও সংকেত কেবলমাত্র "নামকরণ" হিসবে কাজ করে, কোথাও বা সংকেত কোনো ধারণার ব্যাখ্যা দেয়, কোথাও আবার সংকেত নিজেকেই নিজে উপস্থাপন করে - আর কিছু করে না। ফলে সংকেতের এই বিবিধ কর্মকাণ্ডের দিকে তাকালে সংকেতনের সংজ্ঞা দেওয়া এক কথায় মুশকিল হয়। তখন সবদিক খোলা রেখে এবং সংকেতনের পূর্ববর্তী ভাষ্যগুলোকে স্থগিত রেখে বলতে হয়: সংকেতন একধরনের সেতু - যা কার্যের সঙ্গে কারণের; ধারণা, প্রায়োগিক বাস্তব এবং অনুমানের সঙ্গে তার উপস্থাপনের; এবং উপস্থাপনের সঙ্গে উপস্থাপনের সম্বন্ধ প্রতিষ্ঠা করে। কিন্তু এও সংকেতনের সংজ্ঞা হল না, কিন্তু সংজ্ঞার কবল থেকে সংকেতনকে রক্ষা করা গেল। শুধু তাই নয়, সংকেত উৎপাদন ও বোঝাপড়ার ক্ষেত্রে জীবের যে কেবলমাত্র সহজাত প্রতিক্রিয়া নয়, সাংস্কৃতিক অনুশীলনেরও ভূমিকা আছে – সে কথাও তো বুঝতে হবে।

৩.১ ফেয়ারদিয়াঁ দ্য সোস্যুর: ফিরে পড়া

ফেয়ারদিয়াঁ দ্য সোস্যুর নিয়ে বাংলায় আলোচনা কিছু কম হয় নি। তবে প্রায় সব আলোচনাতেই, ভাষাগত সংকেতের প্রকৃতি বোঝাতে সোস্যুর-কথিত ওই কয়েক-জোড়া সম্পর্কের দিকে শুধু আলোকপাত করা হয়েছে মাত্র। 'কোর্স ইন জেনারেল লিঙ্গুইস্টিক্স'-এর প্রথম অধ্যায়ে সোস্যুর খুব সংক্ষেপে এই সমস্ত চর্চাগুলো সম্বন্ধে পর্যালোচনা করে বলেছেন এইসব তুলনামূলক বিদ্যার চর্চার গুরুত্ব অনস্বীকার্য হলেও - একথা স্বীকার করতে বাধা নেই যে - এইসমস্ত চর্চা ভাষার বৈজ্ঞানিক আলোচনার ক্ষেত্রে ব্যর্থ হয়েছিল। যেমন, একটা গণ্ডগোল হচ্ছে এই সমস্ত তুলনামূলক শব্দবিদ্যার বিশারদরা যাঁরা মূলত ভারোপীয় বা ইন্দো-ইউরোপীয় পরিবারের ভাষাগুলো নিয়েই চর্চা

করতেন, তাঁরা কখনো তাঁদের ওই তুলনার মধ্যে দিয়ে উঠে বিভিন্ন ভাষার শব্দগুলোর মানে বা তাৎপর্য নিয়ে প্রশ্ন তোলেন নি। সোস্যুর বলছেন, তাঁদের চর্চার পদ্ধতি ছিল তুলনামূলক, ঐতিহাসিক নয়। তাঁর মতে ঐতিহাসিক পুনর্গঠনের ক্ষেত্রে তুলনা অবশ্য কর্তব্য - কিন্তু ওই তুলনাটুকুই শেষ কথা নয়। দ্বিতীয় অধ্যায়ে, সোস্যুর ভাষাবিজ্ঞানের পরিধি বিষয়ে আলোচনা করেছেন। ভাষাবিজ্ঞানের কাজ কতটুকুর মধ্যে সীমাবদ্ধ থাকবে আর কোথায় সে বিস্তার লাভ করবে - এই বিষয়ে সোস্যুরের বক্তব্য খুব সংক্ষিপ্ত এবং সোজা-সাপটা:

এক, প্রত্যক্ষ করা যায় এমন সমস্ত ভাষার প্রামাণিক সাক্ষ্য খুঁজে বের করা এবং তার বর্ণনা দেওয়া। এই বর্ণনার মধ্যে ভাষা পরিবারের ইতিহাসের সূত্র থাকবে এবং সেই ভাষা পরিবারের মা-ভাষাকে পুনর্গঠিত করতে হবে।

দুই, পৃথিবীর সমস্ত ভাষার ক্ষেত্রে বিশ্বজনীনভাবে সত্য এমন সূত্রগুলোকে খুঁজে বের করতে হবে। সমস্ত প্রত্যক্ষজাত উপাদানের ভিত্তিতে ভাষার নিয়মকে সংক্ষিপ্ত করতে হবে যে নিয়মের মধ্যে ভাষার সমস্ত ঐতিহাসিক সূত্রের সমাপতন ঘটবে।

তিন, ভাষা বলতে ঠিক কী বোঝায় তাকে ব্যাখ্যা করতে হবে।

অন্যান্য বিজ্ঞান যেভাবে কাজ করে ভাষা-বিজ্ঞানের সেভাবে কাজ করার ক্ষেত্রে একটু অসুবিধে আছে। পদার্থবিজ্ঞানের অভীষ্ট বিষয় পদার্থ বা বস্তুজগত। কিন্তু ভাষাবিজ্ঞানের যা অভীষ্টবস্তু তা পদার্থের মতো নয়। সেইজন্য আগে ঠিক করা দরকার ভাষাবিজ্ঞানের অলোচ্য বিষয় কী হবে, তার ধারণাগত স্পষ্টতা না থাকলে বিজ্ঞানের কাজ এগোনো সম্বভ নয়। ভাষাবিজ্ঞানে অভীষ্টবস্তুর ধারণা ও প্রকৃতি নিয়ে যে সমস্ত সমস্যা তার একটা হিসেব দিয়েছেন সোস্যুর।

এক, উচ্চারিত ধ্বনির উপলব্ধি কানের মাধ্যমে হয় ঠিকই কিন্তু ওই ধ্বনির অস্তিত্বই থাকতো না যদি বাক্-প্রত্যঙ্গের মাধ্যমে ওই ধ্বনির জন্ম না হত। তাহলে ধ্বনিকে আমরা কিছুতেই ওই বাক-প্রত্যঙ্গ-রহিত অস্তিত্ব হিসেবে ভাষার কনিষ্ঠতম উপাদান হিসেবে দেখতে পারব না। আবার উলটো দিক থেকে দেখলে, ধ্বনিকে আমরা ধ্বনি-সংক্রমণের মাধ্যম ইত্যাদির থেকে বিচ্ছিন্ন করেও দেখতে পারব না।

দুই, যদি ধ্বনির অস্তিত্বকে স্বীকার করি তাহলে কি বলা যাবে যে এই ধ্বনিই আসলে ভাষা গঠন করে? সোস্যুর বলছেন, না। ধ্বনি কেবল চিন্তার একটা সরঞ্জাম মাত্র, এর নিজের কোনো অস্তিত্বই আসলে নেই। এখানেই একটা সংশয়কে নতুন করে দেখা প্রয়োজন। একটা ধ্বনি, একটা জটিল ধ্বনি-মাধ্যম-সম্পৃক্ত একক, সামাজিক ধারণার পরিপ্রক্ষিতে সেই এককের সমবায়ের শারীরিক ও মানবিক একক হিসেবে আত্মপ্রকাশ করা – এই সামগ্রিক প্রক্রিয়ার বিবরণ দেওয়া যাবে কী উপায়ে? সেই বিবরণেও ভাষার সামগ্রিক চিত্র পাওয়া যাবে না।

তিন, কারণ, মানুষের মুখের ভাষার (সোস্যুর বলছেন স্পিচ) একটা ব্যক্তিগত দিক আছে আর একটা সামাজিক দিক আছে - আমরা ওই দুটো দিকের একটা বাদ দিলেই আর ভাষার সমগ্র চিত্রটা ধরতে পারব না।

চার, ভাষা, ওই স্পিচ অর্থে, বলতে বোঝায় একটা প্রতিষ্ঠিত নিয়ম এবং একই সঙ্গে একটা বিবর্তনের ফলশ্রুতি। অর্থাৎ, একই সঙ্গে ভাষা একটি প্রচলিত (সামাজিক) প্রতিষ্ঠানের বস্তু এবং একটি অতীতের বর্তমান রূপ। এই দুটোই খুব সংশ্লিষ্ট বিষয়। সুতরাং একটা ভাষাকে বিচার করতে গেলে একটা বিষয় থেকে আর একটা বিষয়কে কীভাবে আলাদা করব সেইটাও খুব সূক্ষ্মভাবে বুঝে নেওয়া প্রয়োজন।

সোস্যুর বলছেন এই সমস্ত সমস্যাগুলো থেকে একমাত্র বেরিয়ে আসার পন্থা হচ্ছে: from the every outset we must put both feet on the ground of language and use language as the norm of all other manifestations of speech. এইখানে সোস্যুর প্রথম লাঁঙ শব্দটা ব্যবহার করলেন এবং সাবধান করে দিলেন "ভাষা" বা লাঁঙকে যেন "মানুষের মুখের ভাষা" বা হিউম্যান স্পিচের সঙ্গে গুলিয়ে ফেলা না-হয়। এই দুটোই সামাজিক জিনিস এবং সমাজ স্বীকৃত নিয়ম কানুন যা মানুষ গ্রহণ করেছে। সামগ্রিক দিক থেকে দেখতে গেলে মানুষের মুখের ভাষা যাঁকে সোস্যুর স্পিচ বলছেন তাঁর বিভিন্ন দিক আছে এবং তা একাধিক বিষয়ের সঙ্গে ওতপ্রোতও বটে। যেমন, মানব-ভাষা একই সঙ্গে শারীরবৃত্তীয় ব্যাপার, মনস্তাত্ত্বিক ব্যাপার, ইত্যাদি। তার নিজেরও একটা শরীর বা ঐক্যবদ্ধ গঠন রয়েছে। আমরা যতক্ষণ না এই গঠনের ঐক্যকে ধরতে পারব ততক্ষণ মানব সমাজের ওই সমস্ত দিকগুলোকেও জানতে পারব না। এখন যাকে মানব-ভাষা বলা হচ্ছে সেই মানব-ভাষায় 'ভাষা'-র স্থান কোথায়? এইখানে সোস্যুরের বইতে সেই বিখ্যাত ছবিটা দেওয়া রয়েছে।

৪. গ্রন্থনবাদ

"সাইন" ওরফে "সংকেত" কাকে বলে বলতে গেলে সোস্যুরের ভাষ্য থেকেই তার রূপরেখা দেওয়া সমীচীন বলে মনে হয়। কারণ সংকেতের গঠন সম্বন্ধে তাঁর ভাষ্যেই পরিচ্ছন্ন কিছু ধারণা দেওয়া হয়েছে। পার্ট ওয়ান, চ্যাপটার ওয়ানে সোস্যুর আলোচনা শুরু করছেন এই বলে যে ভাষাকে লোকে একটা পর্যায়ে নামকরণ হিসেবে বোঝে। যেমন, বস্তুর নাম। এখানে বস্তু (অবজেক্ট অর্থে) এবং নামের মধ্যে সেতু বেঁধে দেয় সংকেত। যেমন, গাছ বললে গাছ নামক অস্তিত্ব বা পাথর বললে পাথর নামক বস্তুটাকে আমরা চিনতে পারি। গাছ এবং পাথর সম্বন্ধে ধারণা আপনার আগে থাকতেই মনের ভেতর ছিল। তাই আমি গাছ এবং পাথর বলতেই আপনার মনের ধারাণার মেলা থেকে ওইদুটোকে আপনি তুলে আনলেন। এখন এই সংকেত মৌখিক বা মনস্তাত্ত্বিক – দুইই হতে পারে। আমার মৌখিক উচ্চারণ আর আপনার মনে থাকা ধারণার মধ্যে সেতু বেঁধে দিল এই সংকেত। সোস্যুর এইখানে ভুল ভাঙিয়ে দিয়ে বলছেন - একটা ভাষাতাত্ত্বিক সংকেত, একটা নাম আর একটা বস্তুকে জুড়ে দিল না কিন্তু, আসলে জুড়ে দিল একটা ধারণার সঙ্গে একটা ধ্বনিচ্ছবিকে (সোস্যুরের ভাষায় "কনসেপ্ট" এবং "সাউন্ড ইমেজ"-কে)। ওই যে "পাথর" লেখাটা কিন্তু বাস্তবিক ধ্বনি নয়, ওটা একটা আকারগত উপস্থিতি মাত্র। কিন্তু ওর মধ্যে এক নির্দিষ্ট মনস্তাত্ত্বিক ধ্বনিচ্ছবিরও উপস্থিতি রয়েছে যা শোনা বা দেখা মাত্র শ্রোতার মধ্যে একটা ধারণাগত বোধ

জাগ্রত হয়ে উঠল। একটা ধ্বনিচ্ছবি অনুভূতিমূলক (সেন্সরি)। যখন সেই ধ্বনিচ্ছবিকে বাস্তবে উপস্থাপন করছি তখন তার মানে আমি অন্য অনেক উপস্থাপন থেকে তাকে আলাদা করছি। অন্যদিকে ধারণা জিনিসটা তো চূড়ান্ত বিমূর্ত। ধ্বনিচ্ছবির এই মনস্তাত্ত্বিক ব্যাপার ফিকে হয়ে আসে যখন আমরা আমাদের নিজের ভাষায় সংকেতনের ঘটনাটা প্রত্যক্ষ করি। আমাদের জিভ বা ঠোঁট না নাড়িয়ে আমি কেবল কথা বলতে পারি নিজের সঙ্গে। কেননা আমরা আমাদের ভাষার পদগুলোকে ধ্বনিচ্ছবি মনে করি, সেক্ষেত্রে আমরা ধ্বনি বা ফোনিমের কথা এড়িয়ে যাই যেগুলো দিয়েই আসলে ওই পদগুলো তৈরি হয়েছে। সোস্যুর বলছেন, আমাদের মৌখিক কাজকর্ম একমাত্র মৌখিক পদেই অনুভূত হয় - তাতে আমরা একটা সামগ্রিক ডিসকোর্সের (এই ক্ষেত্রে কথোপকথন) ভেতরকার ছবির অনুভূতির প্রতি সচেতন হয়ে উঠি। আমাদের এই ভুল বোঝাবুঝির অবকাশ থাকে না যদি আমরা পদের ধ্বনি (সাউন্ড) ও দল (সিলেবল) নিয়ে কথা বলি, অবশ্য সেক্ষেত্রে মনে রাখতে হবে "নাম" আসলে "ধ্বনিচ্ছবি"-কেই নির্দেশ করে।

ভাষাতাত্ত্বিক সংকেতকে সোস্যুর একটা দ্বিমুখী মনস্তাত্ত্বিক অস্তিত্ব হিসেবে দেখিয়েছেন। এই হিসেবটারই ছবিটা খুব বিখ্যাত পাঠকের কাছে। সেই যে একটা ডিম্বাকৃতি গোলকের আনুভূমিক মাঝ-বরাবর রেখা টানা, যার ওপরের অংশে লেখা "কনসেপ্ট" আর নিচের অংশে লেখা "সাউন্ড-ইমেজ"। ওই ডিম্বাকৃতির ডান ও বাঁ পাশে যথাক্রমে দুটো তীর নিচের দিকে ও ওপরের দিকে মুখ করা। সোস্যুর এইভাবেই ধ্বনিচ্ছবি আর ধারণার সমাহারকে সংকেত বলেছেন। এইরকম বর্ণনায় বিভ্রান্তির সৃষ্টি হতে পারে ভেবে তিনি ধ্বনিচ্ছবির নাম দিয়েছেন সিগনিফায়ার (আমরা যাকে বলবো "সংকেতক") আর ধারণাকে বলেছেন সিগনিফায়েড (আমাদের দেওয়া নাম "সংকেতিত")। ভাষাতাত্ত্বিক সংকেতের ক্ষেত্রে শর্ত নম্বর এক: ভাষাতাত্ত্বিক সংকেতের চরিত্র অবাধ বা আর্বিট্রারি। যেমন, ভাষা পালটে গেলে সংকেতক পালটে যায় কিন্তু সংকেতিত স্থির থাকে। সংকেতক আসলে সামাজিকভাবে স্বীকৃত ধ্বনিচ্ছবি আর সেটা ভাষায়-ভাষায় ভিন্ন। যখন সংকেততত্ত্ব বিজ্ঞান হিসেবে আত্মপ্রকাশ করলে এই প্রশ্ন উঠবে যে - সংকেততত্ত্ব কি সম্পূর্ণ প্রাকৃতিক সংকেতের ওপর নির্ভর করে অভিব্যক্তির বিভিন্ন প্রক্রিয়াকে অন্তর্ভুক্ত করতে পারছে? ধরা যাক পারছে। যেমন, "প্রাকৃতিক সংকেত" বলতে সোস্যুর উদাহরণ দিচ্ছেন পুতুলনাচের। কিন্তু শর্ত অনুযায়ী সেই সংকেতের সামগ্রিক চরিত্রকে অবাধ হতেই হবে। মজার কথা হচ্ছে সোস্যুর বললেন, ভাষাতাত্ত্বিক সংকেত ভাষার তন্ত্র নিয়ে বিশেষত কথা বললেও, সংকেততত্ত্ব দিয়ে বিশ্বের সমস্ত তন্ত্রকে ব্যাখ্যা করা যাবে।

"সিম্বল" ওরফে "প্রতীক" শব্দটাকে ভাষিক সংকেতের কাজে ব্যবহার করা যায়, বিশেষ করে "সংকেতক" বা "সিগনিফায়ার" বোঝাতে। আর "অবাধ" বলা হচ্ছে এই কারণে, যে বক্তা কোনো ধারণা বোঝাতে কী সংকেতক ব্যবহার করবে সেটা সম্পূর্ণ তার ওপর নির্ভর করে। এক নম্বর শর্তে দু-রকম আপত্তি উঠতে পারে। যেমন, অনোম্যাটোপিয়া বা অনুকার শব্দের প্রসঙ্গ টেনে কেউ বলতে পারেন যে, এই ধরনের শব্দ তো অবাধ নয়। বেড়াল 'মিউ মিউ' করেও ডাকে আবার 'ম্যাও ম্যাও' ডাকে কিংবা মানুষের বাচ্চা 'ওঁয়া ওঁয়া' করে কাঁদে বা ধরুন কেউ 'গব গব' করে ভাত খেল। ওইসব ডাক যেমন শুনতে লাগে তেমনভাবেই তার ধ্বনিচ্ছবি বানানো হয়। তাহলে সেই ধ্বনিচ্ছবি অবাধ হবে কী করে? সোস্যুরের উত্তর হচ্ছে - ওই শব্দগুলো বস্তবে যেমন তার যথার্থ ধ্বনিতাত্ত্বিক ও পদানুতাত্ত্বিক বিবর্তনের মধ্যে দিয়েই ভাষায় নির্মিত ও ব্যবহৃত হয়েছে। খেয়াল করলেই বোঝা যাবে, সত্যি

সত্যিই ভাত খেয়ে ঢোক গিললে 'গব গব' করে আওয়াজ হয় না, বা বেড়ালের ডাককে আমরা 'মিউ মিউ' করে তুলেছি মাত্র।

দ্বিতীয় আপত্তি উঠতে পারে, "ইন্টারজেকশন" বা "বিস্ময়বোধক" উচ্চারণগুলোকে নিয়ে। সেগুলোর ক্ষেত্রেও একই প্রশ্ন ওঠে। মার্গ সঙ্গীত শুনে বা ভালো সিঙ্গাড়া খেয়ে কেউ যদি 'আহা' বা 'আহ্' বলে ওঠে - তখনও তো সেগুলো অবাধ নয়। মানুষের মধ্যে থেকে কোনো অনুভূতির ন্যাচারাল ফোর্স থেকে ওগুলোর উৎপত্তি। এখানে সোস্যুর বলছেন, খেয়াল করলে দেখা যাবে যে, এই ধরনের বিস্ময়বোধক উচ্চারণগুলো সংকেতক হিসেবে আসলে কোনো নির্দিষ্ট ধারণাকে সংকেতিত করছে না। অর্থাৎ এসব ক্ষেত্রে সংকেতক ও সংকেতিতর মধ্যে কোনো নির্দিষ্ট সেতু নেই।

সংকেত নিয়ে সোস্যুরের দ্বিতীয় শর্ত হচ্ছে, সংকেতকের আনুভূমিক চরিত্র (দ্য লিনিয়ার নেচার অফ দ্য সিগনিফায়ার)। অর্থাৎ, ধ্বনিচ্ছবি হিসেবে সংকেতকে দুটো বৈশিষ্ট্য থাকা বাঞ্ছনীয়: ক) সংকেতকের একটা সময় পর্ব (স্প্যান) থাকবে এবং খ) সেই সময় পর্বকে একটা নির্দিষ্ট মাত্রায় বা ডাইমেনশনে অর্থাৎ পাশাপাশি মাপতে পারা যাবে। সংকেতকের এই পর্ব একটা সরল রেখা। সোস্যুর বলছেন সমগ্র ভাষা এই মেকানিজম দিয়েই গঠিত। বরং দৃশ্যগত সংকেতকের ক্ষেত্রে ব্যাপারটা কেবমাত্র সরলরৈখিক নয়। যেমন একটা পেইন্টিং-এ বিভিন্ন ডাইমেনশন থেকে আসা বিভিন্ন সংকেতকের একটা সামগ্রিক উপস্থাপন থাকে। সব মিলিয়ে দর্শকের মনে তা এক বা একাধিক ধারণার জন্ম দেয়। কিন্তু ভাষার ক্ষেত্রে ব্যাপারটা সেরকম নয়। যদিও সোস্যুর বলছেন, মনে হতে পারে ভাষার ক্ষেত্রেও কোথাও কোথাও ওই সরল রৈখিক চেহারাটা অবশ্যম্ভাবী নয়। যেমন দল বা সিলেবেল উচ্চারণে সময় মনে হতে পারে আমরা বোধহয় একই সময়ে একাধিক গুরুত্বপূর্ণ উপাদানের দিকে তাকাচ্ছি। কিন্তু সোস্যুরের মতে ওটা একটা ভ্রমমাত্র। কারণ দল উচ্চারণের ক্ষেত্রেও প্রক্রিয়াটা আসলে ধ্বনি-উৎপাদন প্রক্রিয়াই।

এবার আরেকবার সংকেতের ওই দ্বিমুখী ছবিটার কথা মনে করুন। যেখানে ডিম্বাকৃতি ক্ষেত্রের মধ্যে সংকেতক-সংকেতিত এবং ক্ষেত্রের বাইরে দুটো তীরের একটাকে ওপরের দিকে মুখ করে, আর-একটাকে নিচের দিকে মুখ করে রাখা। যখন আমরা ভাষার একটা শব্দকে আলাদা করে স্ব-ব্যাখ্যাত অস্তিত্ব হিসেবে দেখি তখন সেই "ধ্বনিচ্ছবি" এবং "ধারণা"-র কথা বলি। কিন্তু সেখানে একটা সমস্যা আছে। কী সমস্যা? সমস্যাটা হল, একটা আস্ত সংকেতে – ধারণা হচ্ছে ধ্বনিচ্ছবির সঙ্গে জুড়ে থাকা অংশ, আবার উলটোটাও বটে। তেমনই, একটা সংকেত নিজেই ভাষার অন্যান্য সংকেতের সঙ্গে জুড়ে থাকা অংশ। ভাষা এমন এক সচল জিনিস যেখানে একটার পর একটা সংকেতের সম্বন্ধ মুহুর্মুহু জুড়তে থাকে পরস্পরের সঙ্গে। এবং প্রত্যেকটা সংকেতের এবং তাদের সম্বন্ধের নির্দিষ্ট মূল্য (বা ভ্যালু) রয়েছে। এখানে "কোর্স ইন জেনারেল লিঙ্গুইস্টিক্স" বইতে সোস্যুর পরপর সংকেতের ছবিগুলোকে পাশাপাশি রেখে ব্যাপারটাকে বোঝাবার চেষ্টা করেছেন - যার প্রতিটা ক্ষেত্রে সংকেতক-সংকেতিতর সম্বন্ধ অটুট রয়েছে। এই পাশাপাশি ছবি আঁকার অন্য তাৎপর্যও রয়েছে - সে কথায় একটু পরেই আসছি। তার আগে উল্লেখ করা দরকার সোস্যুর ভাষার মূল্যকে, ভাষার তাৎপর্যের থেকে আলাদা করেছেন। তিনি বলছেন, যখন আমরা কোনো শব্দের মূল্যের কথা বলি - তখন আমরা শব্দের সেই উপাদানটার দিকে তাকাই যেটা ভাব বহন করে। মূল্য, তাৎপর্যের একটা উপাদান তো বটেই, কিন্তু "মূল্য" আর "তাৎপর্য" এক জিনিস নয়।

সোস্যুর সুন্দর দৃষ্টান্ত দিয়েছেন, সংকেতের সঙ্গে সংকেতের সম্বন্ধ বোঝাতে গিয়ে। একটা কাগজের বড় টুকরোকে যদি ছিঁড়ে চার টুকরো করা হয় - তাহলে ওই চার টুকরো চারটে সংকেতের মতো। সুতরাং এটা বলা অত্যন্ত সহজ যে ওই ছেঁড়া চারটে টুকরোর পরস্পরের মধ্যে সম্বন্ধ রয়েছে। কিন্তু এও মনে রাখতে হবে, প্রতিটা কাগজের দুটো পিঠ রয়েছে - সেই দুই পিঠও একে অপরের থেকে অবিচ্ছিন্ন সম্বন্ধে অবস্থান করছে।

সমস্যাটা পুরোপুরি বুঝতে গেলে, সোস্যুরের পাঠ্য ধরে আরও একটু এগোতে হয়, ধৈর্য রেখে। মূল্যের মধ্যে একটা স্ববিরোধী ব্যাপার রয়েছে। সে ভাষার মূল্যই হোক বা অন্য কিছুর। কারণ তারা সবসময় গঠিত হয় - বিসদৃশ বস্তুর সমন্বয়ে বা সদৃশ বস্তুগুলোর মধ্যে তুলনায়। যে বস্তুগুলোর দেওয়া-নেওয়া এমন কোনো জিনিসের জন্য ঘটে যার ওপর মূল্য নির্ধারিত হয়। দুটো ঘটনাই মূল্যের অস্তিত্বের জন্য প্রয়োজনীয়। সোস্যুর "ফ্রাঁ" দিয়ে দৃষ্টান্ত পেশ করেছেন, আমি সেটাকে "টাকা"-তে কনভার্ট করলাম। ব্যাপারটা বোঝাবার জন্য। একশ টাকা বলতে আমরা কী বুঝি? একশ টাকা বোঝবার জন্য আমাদের দুটো জিনিস খেয়াল রাখতে হয়। (১) একশ টাকার বিনিময়ে আমরা কী কী বিসদৃশ জিনিস আমরা পেতে পারি। ধরা যাক, একশ টাকায় এক কিলো মুরগীর মাংস পাই কিন্তু একশ গ্রাম পোস্ত পাই। কথার কথা বলছি। (২) আবার সদৃশ জিনিস দিয়েও বুঝতে হয় একশ টাকাকে। যেমন, দশটা দশ টাকার নোট আর একটা একশ টাকার নোট একই ব্যাপার। শব্দের ক্ষেত্রেও মূল্যকে বুঝতে হবে ঠিক একইভাবে। শব্দের মূল্যও তৈরি হয়, শব্দের বিসদৃশ ধারণার সমন্বয়ে এবং সদৃশ অন্যান্য শব্দের মধ্যে তুলনার মধ্যে দিয়ে। সবচেয়ে সহজ উদাহরণ হল, "গোধুলি" আর "ট্যুয়াইলাইট" এই দুই ভিন-ভাষার দুই শব্দের তাৎপর্য সোস্যুরের মতে এক, কিন্তু এদের মূল্য আলাদা। মূল্যের ধারণা বুঝিয়ে দেয় যে – সংকেতকে, সংকেতক-সংকেতিতর বেশি কিছু ভাবতে গেলে মুশকিল এবং যে তন্ত্রের মধ্যে এই সংকেত সক্রিয়, সেই তন্ত্র থেকে একে বিচ্ছিন্ন করলেও সংকেতের সামগ্রিক কাজের ক্ষেত্রকে বোঝা যাবে না। একইসঙ্গে সামগ্রিক তন্ত্রের গঠনে যে সংকেতগুলো বিশিষ্টভাবে কাজ করে - তাদের বিশিষ্টভাবেও বোঝা সম্ভব। অর্থাৎ ভাষা একটা সামগ্রিক তন্ত্র হলেও তার গঠনকে যে বিশ্লিষ্ট করে বোঝা যে সম্ভব - এই কথার মধ্যেই ছিল গ্রন্থণবাদী চর্চার মূল সূত্র।

মানের এই সম্বন্ধবাচক ধারণা ভেদমূলক। সোস্যুর সংকেতের ভেদের ওপর জোর দিয়েছিলেন। তাঁর কাছে ভাষা অন্যান্য তন্ত্রের মতোই একটা তন্ত্র যেখানে যে-জিনিস সংকেতকে সমগ্র তন্ত্র থেকে আলাদা করে সেই জিনিসই সংকেতকে গঠন করে। এই কারণেই অধিভাষার দরকার হয়। কারণ সংকেত বা সামগ্রিকভাবে ভাষাকে ব্যাখ্যা করতে গেলে কেবলমাত্র ওই ভাষায় ব্যবহৃত উপাদানগুলো দিয়ে কাজ হয় না। নতুন নতুন পরিভাষা ও কৌশল অবলম্বন করে ভাষা সম্বন্ধে ভাষ্য রচনা করতে হয়। বিজ্ঞাপন এক্ষেত্রে সবচেয়ে সহজ উদাহরণ। যে পণ্যের বিজ্ঞাপন দেওয়া হচ্ছে বিজ্ঞাপন নিজে তো সেই পণ্য নয়। কিন্তু প্রতিটা সংকেতের উল্লেখ্য বাস্তবিক বস্তু এক হলেও সংকেতগুলো পরস্পরের থেকে আলাদা।

সোস্যুর সংকেতগুলোর ভেতরে নেতিবাচক এবং বিপরীত পার্থক্যের ওপর জোর দিয়েছিলেন। তাই সেই পার্থক্যের ভিত্তিই ছিল গ্রন্থনবাদী বিশ্লেষণের প্রধান জিনিস। তাঁর মতে ধারণাকে তার বিষয়বস্তুর নিরিখে ইতিবাচক অর্থে ব্যখ্যা করা যায় না - কিন্তু একই তন্ত্রের ভেতরে তার নেতিবাচক অর্থে সেই ধারণার সুস্পষ্ট অস্তিত্ব বোঝা সম্ভব। যদি আমাদের ভাষায় আমাদের কেউ বুঝিয়ে না দেয় যে এতগুলো গাছের মধ্যে এইটাই কেবল জামরুল গাছ,

বাকিগুলো জামরুল গাছ নয় - তাহলে আমরা জামরুল গাছ চিনবো কেমন করে। শুধুমাত্র জামরুল গাছ সম্বন্ধে বলা মুশকিল যদি না ওই পার্থক্যটা দেখানো হয়। যদিও সোস্যুর জোর দিয়েছেন মানুষের "মুখের কথা"-র ওপর। তবে তিনি এও বলেছেন যে লেখাতেও বর্ণগুলোর যে মূল্য তা অন্যান্য বর্ণের সঙ্গে তার ফারাকের ভিত্তিতেই গড়ে ওঠে। সংকেতের মধ্যে পরস্পর এক অবাধ সম্বন্ধে আবদ্ধ থাকলেও সংকেতক ও সংকেতিত প্রত্যেকেই নিজের নিজের ক্ষেত্রে পার্থক্য ও নেতিবাচক সম্পর্কের মধ্যে দিয়ে তৈরি হয়। আবার যখন সংকেত হচ্ছে - তখন সংকেতগুলোও পরস্পরের সঙ্গে পার্থক্য ও নেতিবাচক সম্পর্কে বাঁধা।

যদি সংকেতক-সংকেতিতর অবাধ সম্পর্ককে মেনেও নিই তাহলেও একরকম বিশ্বাস আমাদের জন্মায় সংকেতিত সংকেতককে নির্ধারিত করে না, বরং সংকেতকই সংকেতিতকে নির্ধারিত করে। সোস্যুরের বক্তব্যকে ফরাসী মনস্তাত্ত্বিক বিশ্লেষক জাঁক লাকঁ গ্রহণ করেছেন অন্যভাবে। তিনি (১৯৭৭) মানব-মনে সংকেতকের প্রাধান্যের ওপর জোর দিতে গিয়ে একটা ছবি আঁকলেন - একটা বাক্সের মাঝামাঝি আনুভূমিক দাগ টেনে ওপরের খোপে রাখলেন বড় হাতের এস অর্থাৎ সংকেতককে আর নীচের খোপে রাখলেন বাঁকা হরফে ছোট-হাতের এস অর্থাৎ সংকেতিতকে। লাকঁর মতে এই দুটোই আসলে সংকেতক। সংকেতিত আসলে পিছলে যাওয়া এক বাস্তব। তাকে প্রত্যক্ষ করতে গেলেই সে তার "আদি" অবস্থান থেকে পিছলে যায়। ফলে তার আদি অবস্থান বলে আদৌ কিছু যে ছিল সেটাই বোঝা যায় না। বরং মনে হয় আসলে সংকতিত বলে কিছু নেই। আমরা যা প্রত্যক্ষ করি সবই সংকেতক, আর সংকেতকের সংকেতক। সোস্যুর বলেছিলেন সংকেতক হচ্ছে সংকেতিতর ধ্বনিচ্ছবি। লাকঁ বললেন, সংকেতক কোনো বদ্ধ ভেদমূলক তন্ত্রে (closed differential system) একধরনের মানেহীন একক। সংকেতিত নেই এমন সংকেতকই খাঁটি সংকেতক। তাঁর ভাষায়: "Every real signifier is, as such, a signifier that signifies nothing. The more the signifier signifies nothing, the more indestructible it is." সেই কারণে লাকঁর মতে ভাষা হচ্ছে আসল বাস্তবের সংকেতক তন্ত্র (সোস্যুর বলেছিলেন ভাষা হচ্ছে একরকম সংকেততন্ত্র)। বরং সংকেতক লাকঁর মতে প্রতীকী ক্রম (সিম্বলিক অর্ডার) গঠনকারী একক। কারণ গঠনের ধারণায় সংকেতক অবিচ্ছিন এক অস্তিত্ব।

৫. বাস্তবের সমস্যা ও রলাঁ বার্ত

রলাঁ বার্ত (১৯৭২) সংকেততত্ত্বের আলোচনাকে এক ধাক্কায় আরও খানিকটা এগিয়ে নিয়ে গিয়েছিলেন। 'মিথোলজিস' গ্রন্থে তিনি বললেন, আমাদের সংস্কৃতিতে সমস্ত কিছুই সংকেত। আর প্রত্যেকটা সংকেত কোনো না কোনো বার্তা বহন করে। একথা বলতে গিয়ে, তিনি সোস্যুর-কথিত সংকেতক-সংকেতিতর সরল দ্বিস্তরীয় সমীকরণে থিতু না থেকে "মিথ"-এর ধরাণা নিয়ে এলেন। বার্তের মতে "মিথ" হচ্ছে, এক ধরণের "নির্বাহী ভাষা" ("পারফরম্যাটিভ ল্যাঙ্গুয়েজ" বা সোজা কথায় "স্পিচ", যা সোস্যুরের ভাষ্যে "প্যারোল" হিসেবে এবং পরে চমস্কির বিশ্বজনীন ব্যাকরণের ভাষ্যে "পারফরম্যান্স" হিসেবে পরিচিত ছিল)। এই "মিথ" ব্যাপারটা কী? প্রথমত বলতে হয়; মিথ হচ্ছে সাধারণ সংকেতের মতোই আর-এক কমিউনিকেশন ব্যবস্থা (সিস্টেম অফ কমিউনিকেশন), দ্বিতীয়ত; মিথ এক-ধরনের বার্তা (মেসেজ) এবং তৃতীয়ত; মিথ তাৎপর্য (মোড অফ সিগনিফিকেশন) তৈরির এক বিশেষ প্রথা। বাংলা ভাষায় মিথ নিয়ে যে-কয়েকটা আলোচনা আছে সেগুলো পাঠক খুঁজলেই পেয়ে যাবেন। আমি আর আলাদা করে সেগুলোর নাম করছি না। মিথ শব্দটার বাংলা তর্জমা করে অনেকে একে বলেছেন "অতিকথন,"

কারণ বার্তের সংজ্ঞা অনুযায়ী মিথ আর যাইহোক এক্ষেত্রে পুরাণ নয়। আমি বর্তমান ভাষ্যের প্রয়োজনে তাকে মিথই রাখলাম। শব্দটার একটাই দল, উচ্চারণেও সুবিধে আছে। ফলে অযথা জটিলতায় গিয়ে লাভ নেই।

এখন সাংস্কৃতিক মিথগুলোকে কীভাবে বিশ্লেষণ করব তার কিছু নির্দিষ্ট নিয়মকানুন আছে সেইগুলোর দিকে নজর দেওয়া দরকার। আমাদের এই ভাষ্যের উদ্দেশ্য তো খুব পরিষ্কার। আমরা চাইছি, আমাদের চারপাশে জগতটা আজ যে-অবস্থায় আছে - তাকে আমরা আদৌ আমাদের শেখা একশ বছরের পুরনো সংকেততত্ত্ব দিয়ে ঠিকমতো বুঝতে পারছি কিনা - সেটা দেখা। সেই একশবছরের বিদ্যাও তো আর থেমে ছিল না - সমাজের পরিবর্তনের সঙ্গে সঙ্গে তার মধ্যেও নানান নতুন নতুন সূত্র আমদানি করা হচ্ছিল। বার্তের মিথও সেইরকমই এক সূত্র। এখনকার যুগ সকল অর্থেই "কৃত্রিম বুদ্ধিমত্তার যুগ" - সেই যুগে মিথের কাজ সম্বন্ধে ওয়াকিবহাল থাকা জরুরি। বিশেষত এই যুগটা যেহেতু প্রধানত, স্যাটেলাইট ও ইন্টারনেট মিডিয়ার যুগ। যে-মিডিয়া বার্তের মতে ভাবাদর্শের অপব্যবহারের ("ideological abuse") জায়গা। ফলে মিথের চরিত্র ঠিকমতো না-জানলে সেই অপব্যবহারের চেহারাটা সঠিক অর্থে ধরা পড়বে না। আর জনপ্রিয় সংস্কৃতির মধ্যেই তো ভাবদর্শের প্রভাব সবচেয়ে বেশি। আমরা সোস্যুরের ব্যাখ্যায় সংকেতের মাধ্যমে মানে-তৈরির প্রক্রিয়া যেভাবে পেয়েছি - বার্তের ভাষ্যে সেই গোটা সংকেতন প্রক্রিয়াটাকেই আমাদের সংস্কৃতির কোনো-কোনো ক্ষেত্রে দেখতে পাচ্ছি আরও উচ্চস্তরের কোনো সংকেতের সংকেতক বা সিগনিফায়ার হিসেবে। একটা সোজা-সাপটা দৃষ্টান্ত খুঁজে নেওয়া যাক প্রথমেই। যেমন ধরা যাক, "মাথায় সিঁদুর দেওয়া"-টা যেমন "বাঙালি হিন্দু বিবাহিত মেয়েদের" সংকেতক হিসেবে কাজ করে, তেমনই "সিঁদুর না-দেওয়া"-টা "বাঙালি হিন্দু অবিবাহিত মেয়েদের" সংকেতক হিসেবে কাজ করে। এ-বিষয়ে কারুর সন্দেহ থাকার কথা নয়। কিন্তু আজকালকার দিনে ধর্মের যাথার্থ মূল্যায়ন করে বা "ওটা একটা অপ্রয়োজনীয় জিনিস" ভেবে, বা অন্য কোনো ভাবাদর্শের জায়গা থেকে, যদি কোনো "বাঙালি হিন্দু বিবাহিত মহিলা" মাথায় সিঁদুর না-লাগান তাহলে সেই "সিঁদুর না-লাগানোটা" "অবিবাহিত হিন্দু মেয়ে"-র সংকেতক হিসেবে কাজ করবে কি? তার মানে যেটাকে "হিন্দুত্ব" নামক বিশ্বাসের একটা সহজ সংকেত সূত্র হিসেবে ভাবতে পারছিলাম – সেটা আদৌ তা নয়। তার অতিরিক্ত কোনো ঐতিহাসিক বা ভাবাদর্শগত প্রেক্ষিত সেখানে কাজ করছে। এই যে সংকেতক-সংকেতিতর সম্পর্ক তার সরল দ্বিমুখী বৃত্তি ছেড়ে "অপর" পথে গেল, "সিঁদুর না-লাগানো মহিলা" মানে "অবিবাহিত হিন্দু বাঙালি মহিলা" – এই সম্পর্ককে ভেঙে ওই সিঁদুরবাহী সংকেতটা "অপর" একরকম প্রতিক্রিয়ার ইঙ্গিত দিল - এইটাই মিথ।

মনে রাখতে হবে সংকেততত্ত্ব এইরকম বিশেষ সরঞ্জাম আমাদের হাতে তুলে দেয়। আমার পারিপার্শিক জগতকে, আমার ভাষার ব্যবহারিক দিকগুলোকে বুঝে নেবার জন্য। কিন্তু আশ্চর্যের বিষয় হল, সংকেততত্ত্বকে এখন ধ্রুপদী বিজ্ঞানগুলোর সমকক্ষ বলে ধরা হয় না। যেমন, ভাষাবিজ্ঞানের ক্ষেত্রেই ধরুন না। সেখানে ব্যাকরণের সঙ্গে সংকেততত্ত্বের আড়ি। কিছুতেই তারা একসঙ্গে কাজ করতে চায় না। সংকেততত্ত্ব অন্যান্য বিজ্ঞানের মতো ভাষাবিজ্ঞানের কাছেও অপাঙক্তেয়। অথচ ভাষা যে সংস্কৃতির অঙ্গ সে বিষয়ে অনেকেই একমত। আর সংকেততত্ত্বের পরিভাষাগুলোকে বিভিন্ন কৌশলে ব্যবহার করে কোনো সাংস্কৃতিক পাঠ্যের বিশ্লেষণ দিব্বিই করা যায়। বরং আমার প্রতিনিয়ত নিত্য বেঁচে থাকার মধ্যে আমার ভাষার যে ব্যবহার তার অনেক ক্ষেত্রেই দেখা যায় যে – আকরণিক ভাষাবিজ্ঞানের (ফরমাল লিঙ্গুইস্টিক্স) পদ্ধতি দিয়ে হয়তো বিশেষ ভাষা ব্যবহারের ব্যাখ্যা করা যায়

না। ফলে আমার ভাষার অস্তিত্বকে বর্তমান বাস্তবের নিরিখে বিশ্লেষণ করতে গেলে আমি কেবল ব্যাকরণের ওই নিয়ম-নিবদ্ধ আকরণিক দৃষ্টিভঙ্গিতে থিতু থাকতে পারি না। খেয়াল করে দেখুন, আমি ভাষ্য শুরু করেছি - বর্তমান যুগে 'বাস্তব' বলে যে-অবস্থাটার মধ্যে আমি বসবাস করি তাকে আমার চর্চার মধ্যে দিয়ে জানতে চেয়ে। ওই যে ইরফানের খানের মৃত্যুর খবর/বার্তার যে ভাষাতাত্ত্বিক চেহারা আমরা পেয়েছিলাম আলোচনার শুরুতে - সেখানে আকরণিক ভাষাতত্ত্বের (বাক্যতত্ত্ব বা আকরণিক আধেয়তত্ত্ব) সূত্রগুলো ব্যবহার করে কি আমরা সত্যে পৌঁছোতে পেরেছিলাম? যখন দেখতে পাচ্ছি - ঠিক এই মুহূর্তে আমার বাস্তবটাকেই আমি আর আগের মতো চরম "বাস্তব" বলে ভাবতে পারছি না - তখন আকরণিক ভাষাতত্ত্বের নিয়মকানুনগুলো আমার কোন কাজে লাগবে? একটা নমুনা দিই। ধরা যাক, ভাষার আনুভূমিক অস্তিত্ব ডিসকোর্স। সেই ডিসকোর্সে একাধিক বাক্য পাশাপাশি জুড়ে যেতে পারে। ফরমাল ভাষাতত্ত্বে "বাক্য"-ই হল ভাষার সর্বোচ্চ একক। এবার সেই ডিসকোর্সের মধ্যে থেকে একটা আমি অত্যাধুনিক বাক্যতত্ত্বের মালমশলা ব্যবহার করে জানতে পারলাম - ও আচ্ছা অমুক বাক্যটায়, আমি এই কারণে, কর্মটাকে বাক্যের শুরুতে টেনে নিয়ে গিয়ে তুলেছি, এমনিতে যে-কর্মের থাকার কথা বাক্যে কর্তা আর ক্রিয়ার মধ্যে। তাকে বাক্যের শুরুতে বসিয়েছি কারণ আমি তার ওপর অতিরিক্ত জোর দিয়ে কথাটা বলছি, তাকে বাক্যের শুরুতে এনে আমি তাকে আলোকিত করছি। আমার লক্ষ্য হল: বাক্যের যে উপাদানের ওপর "আমি" "বক্তা" হিসেবে জোর দিচ্ছি, সেই জোর-দেওয়ার খবর যাতে শ্রোতার মনেও একইভাবে পৌঁছোয়। সেই 'কারণ'-টা নিতান্ত ভাষা ব্যবহারের কারণ। সমাজ, সাম্প্রতিক সময় ও সেই ভেতরে ভেতরে বদলে যাওয়া 'বাস্তব'-এর পরিপ্রক্ষিতে – "কোরান তোমার অবশ্যই পড়া উচিৎ" - এই বাক্যটার বিশ্লেষণে বাক্যতত্ত্ব কোনোভাবেই আমাকে সাহায্য করছে না। কেন ওই বাক্যে "কোরান" কর্ম হওয়া সত্ত্বেও বাংলা ভাষার সাবেকী নিয়ম মেনে না-চলে তাকে বাক্যের শুরুতে নিয়ে এলাম – এই প্রশ্নের উত্তরে বাক্যতত্ত্ব ওই জোর দেবার কথা, আলোকিত করবার কথা বলবে ঠিকই, কিন্তু কেন জোর দিতে চেয়েছি, আমার মনের সেই ইচ্ছেটাকে সে তার বেশি আর ব্যাখ্যা করতে পারবে না। ভাষাগত কারণটা জানাও জরুরি, একথা অস্বীকার করছি না। যে-কোনো বিদ্যাতেই কিছু নিয়ম-নিবদ্ধ পাঠ আছে - সেগুলো সকলকেই আয়ত্ত করতে হয় - এবং সেগুলো আসলে কর্মীদের সার্বিক বিশ্লেষণবোধেও সাহায্য করে। কিন্তু এখনকার পৃথিবীতে যেখানে মানুষের "প্রয়োজন" বোধটাই আর মানুষের হাতে নেই - সেখানে আকরণিক চর্চার পাশাপাশি আরেকটু এগিয়ে গিয়ে না ভাবলে ভাষার এই বাস্তব চেহারার ব্যাখ্যা দেওয়া মুশকিল। অনতিকালের মধ্যে মানুষ শুধুমাত্র "ক্রেতা"-য় পরিণত হবে। এখনই সেই পরিণতির সুস্পষ্ট রেখা আমাদের চারপাশে আঁকা হয়ে গেছে। তখন গ্রন্থনবাদী এবং অতঃপর আকরণবাদী চর্চার মধ্যে দিয়ে মানুষ কি-আর তার বাস্তবের ব্যাখ্যা দিতে পারবে?

তাই বার্ত মিথের উৎপত্তি বিষয়ে বলতে গিয়ে প্রথমেই বলেন - কিছু মিথ আমি আমার দৈনন্দিন জীবনেই দেখতে পাই। তাঁর ভাষায় (অবশ্যই অনুবাদে): In the account given of our contemporary circumstances, I resented seeing Nature and History confused at every turn, and I wanted to track down, in the decorative display of what-goes-without-saying, the ideological abuse which, in my view, is hidden there"। মিথের আক্ষরিক অভিব্যক্তির মধ্যে থেকেই কিন্তু বার্ত তাঁর আলোচনা শুরু করেছেন। অর্থাৎ যেখানে মিথ মানে পুরাণ। পুরাণ আমাদের কী করে? পুরাণ তো মিথ্যে কিংবা এমন ঘটনা যা বাস্তবে সত্যি

কিনা পরীক্ষা করে নেওয়া যায় না। অথচ এই পুরাণ আমাদের সাংস্কৃতিক গঠনে বিরাট বড় এক ভূমিকা নেয়, আমাদের বিশ্ববীক্ষা তৈরি করে। তাই মিথকে বলা হয় - মিথ একই সঙ্গে সত্যি এবং একই সঙ্গে মিথ্যে।

বার্ত বললেন যে, সাংস্কৃতিক কাণ্ডকারখানাগুলোর প্রকৃতিকে বোঝার জন্য মিথকে বুঝতে হবে এক-ধরনের ভাষা হিসেবে। বার্ত মিথীয় বার্তাকে ব্যাখ্যা করেছিলেন একটা মানচিত্রের মতো, যার নিচের দিকে রয়েছে "অভিধা" বা "ডিনোটেশন" আর ওপরের দিকে রয়েছে "অভিধাধিক মানে" বা "কনোটেশন" (এখানে "কনোটেশন" ভারতীয় "লক্ষণা"-র ধারণার সঙ্গে জুড়ে দিতে পারলাম না, মাপ করবেন)। যেহেতু আমরা ইতিমধ্যেই বুঝতে শুরু করেছি যে বাস্তবের উপাদানগুলো নিজে থেকেই পরিপর্তিত হয়ে যাচ্ছে। সুতরাং নতুন কোনো "ভাষ্য" ছাড়া এই বাস্তবের বস্তুনিষ্ঠ ব্যাখ্যা দেওয়া সম্ভব নয়। মিথ-নির্ভর বিশ্লেষণ - একটা সংকেততন্ত্রে সংকেতের সমস্ত-রকম চেহারার মধ্যেকার যে সম্পর্ক সেই সম্পর্কের বিবরণ দেয়, তার সম্পর্কগুলোকে ব্যাখ্যা করে। কেননা সেই সংকেততন্ত্রই তো আমাদের আকার-নির্ভর সাংস্কৃতিক অনুমানগুলোর (যে অনুমানগুলোকে সত্য বলে ধরে নেওয়া হয়) মানে তৈরি করে। বার্ত-কথিত "মিথ," প্রাথমিকভাবে কাজ শুরু করে সেইসমস্ত ভাবাদর্শগুলো নিয়ে যেগুলোকে আমরা ধরে নিই "প্রাকৃতিক" জিনিস বলে, যদিও তারা আসলে "সাংস্কৃতিক"। যেমন, আমাদের সংস্কৃতিতে বিষম "লিঙ্গ" ও "যৌন" ধারণার ভিত্তিতে তৈরি হওয়া বিশ্বাসগুলোর দিকে তাকালেই আমরা ওই প্রক্রিয়ার "বাস্তবতা" বুঝতে পারি। অর্থাৎ মানুষের যৌন-পরিচয়ে সে পুরুষ কিংবা নারী – এইটাকে আমরা ধরে নিই "প্রাকৃতিক" বিভাজন বলে, আর লিঙ্গভেদে পুরুষ-মহিলার বিভাজনকে আমরা ধরে নিই "সাংস্কৃতিক" বলে? মিথের বিশ্লেষণ প্রশ্ন তোলে ওইখানে। সে আপনার বিশ্বাস থেকে, "পুরুষ-নারী"-র প্রাকৃতিক দ্বিকল্পনকেও প্রশ্নের মুখে দাঁড় করিয়ে দেয়, "অপর" যৌন-পরিচয়গুলির প্রসঙ্গ তুলে বলে – "আপনি যে অতিনির্ণয়ের মধ্যে দিয়ে এক্সক্লুশনের রাজনীতিটা করলেন, সেটা আমি ধরতে পেরে গেছি।"

আমরা আমাদের সংস্কৃতিতে পারস্পরিক ভাবের আদান-প্রদানের জন্য যে "বার্তা" বিনিময় করি, মিথ সেই বার্তার শরীরে ঢুকে পড়ে। এবং বার্তের কথায়, বার্তার শরীরে ঢুকে পড়ে মিথ তার নিজের অস্তিত্বকে অস্বীকার করে। যে বার্তায় সে ঢুকে পড়েছিল সেই বার্তাকেই দেখিয়ে বলে "এই তো আমি।" আর মানুষ যতক্ষণে "মিথ" চিনতে শেখে, সে ততক্ষণে তার পূর্ববর্তী অবস্থান থেকে চম্পট দেয়। মিথ নিয়ে বার্তের একটা বিখ্যাত উদাহরণ আছে। সেই দৃষ্টান্তে যাবার আগে, পাঠকদের আরও একবার মনে করিয়ে দেওয়া দরকার মিথ – সংকেতনের সোজা রাস্তা দিয়ে হাঁটে না, রাস্তার পাশ দিয়ে "অন্য" রাস্তা বানায় বা হিসেবের উর্ধে উঠে কাজ করে। সংকেতন প্রক্রিয়ার যে দ্বিমুখীতা সোস্যুর দেখিয়েছিলেন - যার একদিকে ছিল সংকেতক আর-এক দিকে ছিল সংকেতিত, সেটাকে যদি "সংকেতনের প্রথম পর্যায়" ধরে নিই, তাহলে "মিথ" হবে "সংকেতনের দ্বিতীয় পর্যায়"। যে সংকেতক ইতিমধ্যেই সংকেতনের প্রথম পর্যায়ের কাজ সম্পন্ন করেছে অর্থাৎ তার নির্দিষ্ট সংকেতিত রয়েছে - সেই সংকেতক যখন তার পূর্ববর্তী সংকেতনের কাজকে ছাপিয়ে উঠে নতুন সংকেত তৈরি করে তখন সে মিথ। বার্তের সেই বিখ্যাত দৃষ্টান্ত হল: 'প্যারিস ম্যাচ' (Paris Match) নামক এক পত্রিকার ১৯৫৫ সালের জুলাই সংখ্যার কভার পেজে ছাপা ছবি। সেই ছবিতে ছিল, একজন নিগ্রো ছেলে ফ্রান্সের জাতীয় পতাকাকে স্যালুট করছে। এই ছবিটা দেখিয়ে বার্ত বলেন, এখানে সংকেতক হল "অভিবাদনরত এক সৈনিক"। এখানে ওই সৈনিকের ব্যক্তিগত জীবন সম্বন্ধে জানবার কোনো বাড়তি খবর দেওয়া নেই। এবং সংকেতিত হল: "ফরাসী জাতীয়তা, তার প্রতি একজন সৈনিকের

আনুগত্য," ইত্যাদি। শুধু তাই নয়, ওই ছবি থেকে এই বোঝা গেল: ফরাসী জাতীয়তা কতই না উদার। তার প্রতি জাতি বর্ণ-নির্বিশেষে সকল মানুষই অঙ্গীকারবদ্ধ। কিন্তু ওই ছবি খোলাখুলি শুধু এই বার্তাই বহন করছে না। বরং বার্তের মতে: "...that there is no better answer to the detractors of an alleged colonialism than the zeal shown by this Negro in serving his so-called oppressors"। আমাদের দেশেও একইরকম উদাহরণ দেখানো যায়, পত্র-পত্রিকায় প্রকাশিত ছবি থেকে। যদি সাম্প্রতিক পরিস্থিতিতে এমন কোনো ছবি আমরাও দেখতে পেতাম, যেখানে একজন সংখ্যালঘু মুসলমান সম্প্রদায়ের মানুষ ভারতের জাতীয় পতাকাকে অভিবাদন জানাচ্ছেন - সেক্ষেত্রেও সংকেতের প্রাথমিক সংকেতনের সীমানা টপকে অন্য এক সংকতনের আভাস আমরাও পেতাম। কিন্তু আপাতত দৃষ্টান্তের চেহারার নকল দেখিয়ে লাভ কম। তার চেয়ে আলোচনার মধ্যে দিয়ে যদি এটা উঠে আসে যে ভারতের সাম্প্রতিক ঘটনাবলির নিরিখে বার্ত-কথিত মিথ অর্থাৎ দ্বি-স্তরীয় সংকেতনেরও উর্ধে তৃতীয় কোনো স্তরের হদিশ পাওয়া যাচ্ছে, তবে সে-ঘটনার উল্লেখ করা জরুরি ছিল। কিন্তু আপাতত আলোচনা, ভূমিকার পর থেকে যতদূর এগিয়েছে তাতে আমরা অনুমান করতে পারছি "তৃতীয়" নয়, বরং অন্য কোনো এক খেলা চলছে বর্তমানে ভারতের "বাস্তবে"। শুধু ভারত কেন, গোলোকায়নের সৌজন্যে সেই "বাস্তব" রাষ্ট্র-নিরপেক্ষও বটে। আচ্ছা সত্যিই কি তাই? সেটা পরীক্ষাসাপেক্ষ! সেই বাস্তবের বিশ্লেষণ করবারই সরঞ্জাম তৈরি হচ্ছে এই ভাষ্যে।

বার্তের মতে সোস্যুর সংকেতের এমন এক "সাধারণ বিজ্ঞান" রচনা করতে চেয়েছিলেন, যেখানে সংকেতের যে-কোনো তন্ত্রকে ভাষা হিসেবে দেখা যায়। এই ক্ষেত্রে ভাষা বলতে - লিখিত ও উচ্চারিত শব্দ, ধ্বনি, সঙ্গীত, ছবি, অঙ্গভঙ্গি, ইত্যাদি সমস্ত কিছুকেই বোঝায়। সোস্যুরের ভাষ্যে সংকেত ছিল একেবারে প্রাথমিক একটা একক যা সংকেতক অর্থাৎ ধ্বনিচ্ছবি এবং সংকেতিত অর্থাৎ ধারণার সমন্বয়ে গড়া। সংকেতক-সংকেতিত আলাদা হলেও তারা কাজ করে একসঙ্গে "ধারণা" আর "মানে"-র সমন্বয়ের জন্য। কিন্তু সংকেত গঠনের এই মানচিত্রে কিছুটা সমস্যাও আছে। এক্ষেত্রে অনেকে (যেমন এলিয়ট ২০০২) মনে করেন, সোস্যুরের প্রভাব যাঁদের মধ্যে পড়েছিল বলে সকলেই জানেন তাঁদের কারুর কারুর কাজের দিকে তাকানো জরুরি। যেমন; ড্যানিশ ভাষাবিজ্ঞানি লুই হ্যেমশ্লেভ। হ্যেমশ্লেভের ব্যাখ্যায় "তাৎপর্য" কীভাবে দুটো ভিন্ন স্তরে কাজ করে তার পরিষ্কার ব্যাখ্যা রয়েছে। হ্যেমশ্লেভের উপকল্পে রয়েছে, "অভিব্যক্তি" বা "এক্সপ্রেশন" এবং "আধার" বা "কন্টেন্ট"-এর মধ্যে একটা সম্পর্ক রয়েছে। প্রথম পর্যায়ের "অভিধার্থ" বা "ডিনোটেটিভ মিনিং"-কে দেখানো যায়, "অভিব্যক্তি" ও "আধার" সম্পর্কের মধ্যে দিয়ে। অনেকে আবার বলেছেন, যে সংকেতক-সংকেতিতর পার্থক্য একটু বেশিরকমের তাত্ত্বিক তার চেয়ে বরং "অভিধায়ন" বা "ডিনোটেশন" এবং "অভিধাধিক অর্থবৃত্তি" বা "কনোটেশন" অনেক বেশি ব্যবহারিক। শব্দের অভিধাবৃত্তি শব্দের আক্ষরিকতার দিকে শ্রোতাকে টেনে নিয়ে যায়। অর্থাৎ এই অভিধাবৃত্তি থেকেই একমাত্র সংকেতকে বিশ্বজনীনভাবে বোঝবার উপায় আছে। যেখানে "অভিধাধিক মানে" বুঝতে লাগে নির্দিষ্ট ভাবাদর্শ বা সাংস্কৃতিক পরিস্থিতি সম্বন্ধে জ্ঞান। সুতরাং এই পার্থক্য দিয়ে বোঝা সহজ ঠিক কোন জায়গায় "সাপেক্ষ বাস্তব" আর "নিরপেক্ষ বাস্তব" পরস্পরের সঙ্গে মিলিত হচ্ছে - এবং সেই যৌথ ক্ষেত্রে ভাবাদর্শের কী কাজ বা কোথায় তার আধিপত্য। "আধিপত্য," হেজেমনির বাংলা হিসেবে বহুল ব্যবহৃত।

ওই যৌথ ক্ষেত্রে, সোস্যুরের "অভিধাবৃত্তি" ও "অভিধাধিক বৃত্তি" সম্পর্কে, বার্তের যে ভাষ্য সেখানেই অন্য আর স্তরের তাৎপর্য বিন্যাসের প্রসঙ্গ ওঠে। যে স্তরে সংকেততন্ত্রকে বুঝতে চেষ্টা করা হয় মূল্যবোধের জায়গা থেকে। মিথও এই একই প্রক্রিয়ায় নির্মিত হয়। সেই কারণে মিথেরও সংকেতনের প্রথম ও দ্বিতীয় পর্যায় থাকে। এই মিথের সাহায্যেই কোনো সংস্কৃতির মানুষ না-বলা কথার মর্মার্থও টের পায়। আমাদের সংস্কৃতি আসলে একটা ঘরের মতো। এই ঘরেই মানুষ জন্মায় এবং বড় হয়। সেইকারণে সে তার সাংস্কৃতিক অভিজ্ঞতা ও ঐতিহাসিকভাবে নির্ধারিত ভাবাদর্শের সাপেক্ষে - আটপৌরে কথোপকথনে অংশগ্রহণ করে, গল্প, কাহিনী, কল্প-কাহিনী, কিস্যা, কথকতা, ইত্যাদি যা তার নিজস্ব সংস্কৃতির অঙ্গ - সমস্ত কিছুর মধ্যেই একটা যুক্তি-নির্ভর গঠন দেখতে পায় এবং সেসব কিছুই সে বুঝতে পারে বা বোঝার চেষ্টা করতে পারে। বার্তের ভাষ্যে মিথও একধরনের সাংস্কৃতিক (রাজনৈতিকও বটে) তাৎপর্য নির্মানের জায়গা। এই জায়গায় সাংকেততাত্ত্বিক সংহিতা (সেমিওটিক কোড) হয়ে ওঠে "বাস্তবের ঘটনা" বা "ফ্যাক্ট"। এই সংহিতা কী জিনিস সেটা এর পরেই আলোচনা করেছি। এখন এই মিথ যে "অভিধাধিক অর্থ" বা কনোটেশনের থেকে আলাদা সেটা বুঝব কী করে? বুঝতে হবে যে, মিথ একার্থে নির্বিশেষ, যে-অর্থে আমরা বলি এই হচ্ছে এর আভিধানিক মানে – ঠিক সেই অর্থে নয়। ওই যে ওপরে বার্তের বিখ্যাত উদাহরণটা পেশ করেছি, ওটা মনে রেখে এটা ভাবলেও চলবে মিথ একরকম অভিধাধিক মানের দিকেই মানুষকে নিয়ে যায় কিন্তু সেটা চূড়ান্ত প্রভাবশালী এক আধিপত্য বিস্তার করে। যেটা সাধারণ কনোটেশন করে না। মিথের একটা ক্ষমতা অনুশীলনের দিক আছে, কনোটেশনের সেটা নেই। কেউ কেউ আবার মিথকে তৃতীয় পর্যায়ের সংকেতন বলেও দাবী করেছেন। তাঁদের মতে, ডিনোটেশন প্রথম পর্যায়, কনোটেশন দ্বিতীয় পর্যায় আর মিথ তৃতীয় পর্যায়ের সংকেতন। সেক্ষেত্রে সংকেতকের অভিধাধিক ব্যবহারের আস্ত ঘটনাটাই মিথে সংকেতক হিসেবে ব্যবহৃত হয়। গণমাধ্যমগুলোর উপস্থাপনের মধ্যে মিথের প্রচুর ব্যবহার থাকে – সেটাও আমরা আলোচনার শুরুতেই দৃষ্টান্তের মধ্যে দিয়ে দেখিয়েছি।

এখন মিথের এই ধারণাকে কীভাবে কোনো বাস্তবকে বিশ্লেষণের কাজে ব্যবহার করব, সেটা বুঝতে গেলে সংকেতক-সংকেতিতর ওই বাস্তবিক হ্যেমস্লেভ-কথিত ব্যাখ্যার দিকেই নজর রাখতে হয়। যেখানে হ্যেমস্লেভ অভিব্যক্তি ও আধারের নিরিখে গোটা ব্যাপারটা বুঝতে চেয়েছিলেন। বাস্তবে সংকেতকের অভিধাধিক ব্যবহারকে বুঝতে গেলে অনেক সময়ই অনুমান-নির্ভর একটা পাঠ লাগে। মিথের ক্ষেত্রেও তেমনই লাগে কোনো বিশেষ ভাবাদর্শের প্রয়োগ সম্বন্ধে জ্ঞান। মিথ যে দ্বিতীয়স্তরের সংকেতন হয়ে উঠবে তার জন্য আমার নিজের সংস্কৃতির ভেতরেই চাই একটা বিশ্বজনীন সংকেত (গ্লোবাল সাইন) ব্যবস্থা। এই সংকেত-ব্যবস্থাকে বার্ত বলেছেন, "অধিভাষা" বা "মেটাল্যাঙ্গুয়েজ"। কারণ, সাধারণ সংকেততন্ত্রকে যদি আমার সংস্কৃতিতে "প্রথম ভাষা" বলি তাহলে মিথ হচ্ছে তাই যা আমার প্রথম ভাষা সম্বন্ধে কথা বলে। যেমন, ধরা যাক, অ্যানিমেশনের সাহায্যে তৈরি চরিত্রগুলো। ওগুলো আসলে "মিথ" এবং এক-অর্থে "অধিভাষা"। কারণ ওই চরিত্রগুলো আসল মানবচরিত্রের সম্বন্ধে বিবৃতি দেয়। মিথ নিজে স্বাভাবিক বাস্তবের মতোই আত্মপ্রকাশ করে কিন্তু এর মানে মানুষকে বুঝে নিতে হয় তার ইতিহাস, সংস্কৃতি ও ভাবাদর্শের কাছ থেকে। সেই কারণে মিথ বিশ্লেষণ করতে গেলে - কোনো সংস্কৃতির সাপেক্ষে বা নিরপেক্ষ অবস্থান থেকে ভাবাদর্শগত অনুমান-ভিত্তিক সত্যগুলোর দিকে তাকাতে হয়। বার্তের নিজের কথায়: "myth hides nothing: its function is to distort, not to make disappear." অর্থাৎ মিথ হচ্ছে খুব সুনিশ্চিত তাৎপর্যের ঘটনা, কিন্তু যে ঘটনাকে আপনি সোস্যুর-কথিত অবাধ সাংস্কৃতিক অভ্যেস দিয়ে বুঝতে

পারবেন না। কারণ সেখানে (বাস্তবে) মানের বিকৃতি ঘটানো হয়েছে। তাই "কনোটেশন" বা "মিথ" – দুটোই আসলে সংহিতার মতো কাজ করে। এখন "সংহিতা" বা "কোড" সম্পর্কে দু-কথা না-বললেই আর চলছে না। আমার-আপনার প্রতিদিনের ব্যবহার্য ভাষা, ছবি, বা অন্য কিছু - যা আমরা নিয়মমাফিক অভ্যেসের সাহায্যে বুঝে নিই বা কোনো ঘটনার বর্ণনা দিই - সেই সমস্তকিছুই আসলে আমাদের সাংস্কৃতিক সংহিতার সঙ্গে মিলে গিয়ে নতুন নতুন "মানে" উৎপন্ন করে।

৬. সমস্যা থেকে সংকটে

কিন্তু আমাদের সমস্যা যে আরও একটু বেশি গভীর এবং কণ্টকিত! কেন - সেকথা বলি। ধরা যাক, আপনি এখন ইন্টারনেটের প্রাণশক্তি সোশ্যাল মিডিয়া মারফত একটা ছবি পেয়েছেন, যেখানে শ্রী নরেন্দ্র মোদি, আপনার দেশের প্রধানমন্ত্রী নামাজ পড়ছেন। ছবিটা সামনের দিক থেকে তোলা। ছবিটা দেখে আপনি বুঝতেই পারলেন না ছবিটা ভুয়ো। এই যে আপনার "বুঝতে না-পারা বাস্তব" যা আপনার "বুঝতে পারা বাস্তব"-এর মতোই ব্যাপার - তাকে আপনি ওই মিথ দিয়ে বুঝবেন কীভাবে? কারণ প্রথমত, আপনি ধরে নিয়ে বসে আছেন, সংকেতিত অর্থাৎ সিগনিফায়েড "আসল বস্তু" আর সংকেতক বা সিগনিফায়ার আসলে "নকল"। অর্থাৎ সেই ধ্বনিচ্ছবি যার কথা সোস্যুর বলেছিলেন, সেটা তো অবাধ - যা-ইচ্ছে-তাই। কিন্তু ধারণা বা বস্তু তো প্রাকৃতিক ও বাস্তবিক। দ্বিতীয়ত, যখন লেখনের প্রসঙ্গ এল তখন বুঝতে শুরু করলেন লেখন হচ্ছে নকলেরও নকল। অর্থাৎ সংকেতকের সংকেতক। অর্থাৎ যে ধ্বনিচ্ছবি আপনি কোনো বস্তু বা ধারণা বোঝাতে ব্যবহার করেন, লেখন সেই ধ্বনিচ্ছবিরও ছবি। সেই ধ্বনিচ্ছবির মধ্যে যে বৈচিত্র্য ছিল, লেখনের মধ্যে সে-বৈচিত্র্যের আর কিছুই অবশিষ্ট রইল না। অর্থাৎ আসল ধারণা বা বস্তুর এক স্থায়ী চিত্ররূপ হল এই লেখন। তৃতীয়ত; আমি ধরে নিলাম আপনি প্রাচীন গ্রিক ও ভারতীয় শাস্ত্রের পাঠ নিয়েছেন বেশ-খানিকটা। সেখানে আপনি ভাষার আরও নানান রকম আলঙ্কারিক সংকেতনের হদিশ পেয়েছেন। যা দিয়ে আপনি বাস্তবকে আরও গভীরভাবে বুঝতে শিখেছেন। আপনি সত্যজিতের অপু-ট্রিলজির মাঝখানের সিনেমাটা দেখছেন তো? হ্যাঁ, আমি "অপরাজিত"-র কথা বলছি। যেখানে অপু প্রেসিডেন্সি কলেজে ক্লাস করতে গিয়ে শিখছে – "মেটোনিমি" আর "সিনেকডকি"-র মানে। আপনিও নিশ্চয়ই মেটাফর বা ভারতীয় সংস্কৃতিতে তৈরি হওয়া "অভিধা," "লক্ষণা," "ব্যঞ্জনা"-র তফাৎটা বোঝেন। এরকম অজস্র ছোট-বড় নানান ধারণা দিয়ে সংকেতনের নানান আলঙ্কারিক প্রয়োগের ভাষ্য রচিত আছে। যেগুলো শিখে নিলে, পাঠক হিসেবে নিজেকে গড়ে তুলতে সুবিধা হয়। চতুর্থত; আপনি দেখলেন বার্তে এসে সেই সংকেতন প্রক্রিয়ার ভাষ্য আরও জটিল হল। বার্ত দেখালেন "বাস্তবের নকল" বলে যা আপনি স্বতঃস্ফূর্তভাবে ধরে নিচ্ছিলেন সেটা আরও এক-কাঠি ওপরে উঠে - বাস্তবের অন্য আরেক দিককে আপনার বোধগম্য করে তুলল।

এই অবধি চলছিল মোটামুটি। এটা বুঝতে পারা যাচ্ছিল, বাস্তবের সঙ্গে মানুষের সম্পর্কের আরও অনেক কিছু আবিষ্কার করা বাকি। এবং সে কাজটা সহজ নয়। কাজ এগোচ্ছিলোও অল্পবিস্তর। বিশেষত; ভাষা বিশ্লেষণের ক্ষেত্রে আমরা অনেকেই ব্যাকরণের পাশে এনে বসাচ্ছিলাম সংকেততত্ত্বকে - যাতে নিয়মনিবদ্ধ ভাষা-চেহারার পাশাপাশি তার আটপৌরে অর্থাৎ বাস্তবিক ব্যবহারের ছবিটা আরও স্পষ্ট করে তুলতে পারি। কিন্তু সারা পৃথিবীতে করোনা-ভাইরাসের আক্রমণ গোটা পরিস্থিতিকে এতটা ভয়াবহ করে তুলবে কে-জানতো? আগেই বুঝতে শুরু করেছিলাম, বিশ্বের সবচেয়ে বড় গণতান্ত্রিক দেশ আসলে গণতন্ত্রের নামে এখনকার পুঁজিবাদের সঙ্গে গভীর প্রেম

স্থাপন করেছে, কারণ গণতন্ত্রের কিছু মৌলিক সূত্রকে পুঁজিবাদও মানবিক বিকাশের মূল সূত্র বলে চালায়। এবং/তাই সমালোচকের ভঙ্গিতে বাস্তবকে আবার বিচার করা শুরু করলাম। এতদিন যে-কাজটা স্থগিত রেখেছিলাম, সংকেততত্ত্বের পুরোনো ভাষ্যগুলোর নিরিখেই। তখনও অবধি "বাস্তব এবং বাস্তবের ক্রমশ বাড়তে থাকা জটিলতা" - এই সূত্রের ওপরেই কেবল জোর দিচ্ছিলাম। কিন্তু কিছুতেই কাজ হচ্ছিল না। মনের মধ্যে একরকম অতৃপ্তি থেকেই যাচ্ছিল। এরই মধ্যে শুরু হল করোনার তাণ্ডব। গোটা পরিস্থিতি হয়ে গেল - লক-ডাউন, সকলেই হয়ে পড়ল "গৃহবন্দী"। ফলে মুহূর্তের জন্য বেরিয়ে আসতে পারলাম বাস্তব থেকে। এতদিন যাকে বাস্তব বলে ভাবছিলাম আমি নিজেও ছিলাম তারই অংশ। ফলে নিজের অজান্তেই বাস্তবের প্রতি একধরনের পক্ষপাতিত্ব থেকে যাচ্ছিল অথচ সেই বাস্তবের অংশ হয়েও আমি সেই বাস্তবকে আমার আশ্রয় হিসেবে ভাবতে পারছিলাম না। কেন পারছিলাম না?

"ভাষা বিশ্লেষকদের ভূমিকা" বিষয়ে একটা কথা মনে রাখতে হবে আপনাদের। আধুনিক ভাষাবিজ্ঞানের "এপিস্টেমোলজিকাল এরা" বা "জ্ঞানতাত্ত্বিক যুগ" ধরা হয় - সোস্যুর কথিত "এ কোর্স ইন জেনারেল লিঙ্গুইস্টিক্স" বইটা প্রকাশিত হবার পর থেকে। যে যুগের সাফল্য সবচেয়ে উঁচুতে ওঠে ভাষাবিজ্ঞানে চমস্কির আকরণিক বিপ্লবের পর। সে-যাই হোক, আধুনিক ভাষাবিজ্ঞানের জন্ম হচ্ছে যে বইটার মধ্যে দিয়ে সেই বইটাতেই কিন্তু নতুন বিদ্যা হিসেবে আধুনিক ভাষাতত্ত্ব বা আধুনিক ভাষাবিজ্ঞান কোনো নামই প্রস্তাবিত হয় নি, প্রস্তাবিত হয়েছিল সংকেততত্ত্ব বা সেমিওলজি নামটা। ওই বইয়ের ভাষ্য অনুযায়ী ভাষাবিজ্ঞান তো পুরোনো জিনিস। নতুন করে ভাষার চর্চা শুরু করতে হবে ভাষাকে একটা সংকেততন্ত্র হিসেবে দেখার ভিত্তিতে। সংকেততত্ত্বই বলুন বা সংকেতবিজ্ঞান - এই দুই বিদ্যার জন্ম হওয়ার কেবলমাত্র ভাষা-ভিত্তিক গবেষণায় নতুন মোড় ফেরানো নয়। বরং যেহেতু ভাষা মানুষের জীবনে প্রাথমিক ও প্রধান অবলম্বন, ভাষায় মানুষ স্বতঃস্ফূর্ত - সেই-কারণে ওই ভাষ্যগুলোয় ভাষাকে ধরা হয়েছিল সংকেত বিশ্বে পৌঁছোনোর প্রথম ধাপ হিসেবে। এবং পরবর্তীকালে দেখা গেছে - বিশ্বের যে-কোনো ঘটনাকে সম্পূর্ণ নতুন কায়দায় বিশ্লেষণ করবার ক্ষমতা রাখে এই সংকেততত্ত্ব। সে রান্না-বান্না থেকে শুরু করে সংস্কৃতির অন্যান্য উপাদান, মানুষের রাজনৈতিক অবস্থান, সামাজিক অবস্থান তো বটেই, সাহিত্য, সিনেমা, সঙ্গীত, ফ্যাশন, এমনকি আধুনিক বিজ্ঞানের ভাষ্য, ঐতিহাসিক দলিলপত্র, টেকনোলজি ফর ম্যানকাইন্ড, টেকনোলজি অ্যাজ আ রেজাল্ট অফ কমোডিফিকেশন অফ সায়েন্টিফিক ডিসকভারি অ্যান্ড ইনভেনশন' - সমস্তরকম ডিসকোর্স নিয়েই সে কথা বলতে পারে। শুধু কথা বলতে পারে তাই নয় - সে মানুষকে তার জীবনের বোঝাপড়ার "বাস্তব" স্তরগুলোকে পেঁয়াজের খোসার মতো খুলে দিয়ে মানুষকে সেই বাস্তবের অন্তর্বর্তী স্তরে পৌঁছে দিতে পারে। সুতরাং ভাষাকে সংকেততন্ত্র হিসেবে দেখতে শেখার মধ্যে দিয়ে যে মানুষ গোটা বিশ্বের, তার চারপাশের জগতের নানান-রকম মানের হদিশ পেতে পারে - সে বিষয়ে অবদান আছে সংকেততত্ত্বের। এবং এই ভেবে আমার হতাশা বেশ খানিকটা কমে যায় - যে - আধুনিক ভাষাবিজ্ঞানের কারক সংকেততত্ত্ব চর্চার হাত ধরে আমিও পৌঁছোতে পারি মানুষের জীবনের কাছে। দুটো দৃষ্টান্ত তুলে আনবো একেবারে সাম্প্রতিক সমস্যার ভেতর থেকে। তুলে এনে বুঝতে চাইব সংকেততত্ত্ব কীভাবে কাজ করতে দেয় আমাদের।

আমি যখন এই রচনায় হাত দিচ্ছি তখন সারা বিশ্বের মানুষ এক কঠিন সময়ের মধ্যে দিয়ে যাচ্ছে। কোরোনা ভাইরাস নামক এক মারণ ব্যাধি গোটা পৃথিবীকে একবারে তছনছ করে দিচ্ছে। সাধারণত যাকে কোরোনা ভাইরাস

বলে তার অনেক রকম, তার মধ্যে একটার বৈজ্ঞানিক নাম কোভিড-১৯। এই মুহূর্তে সারা পৃথিবীজুড়ে কোভিড-১৯-এ আক্রান্ত হয়ে মারা গেছেন দু-লক্ষেরও বেশি মানুষ। কোনো দেশই প্রায় নিস্তার পায় নি এই কোভিড-১৯-এর করাল থাবা থেকে। দেশে দেশে মানুষের মধ্যে "সামাজিক দূরত্ব" বজায় রাখার জন্য "লক-ডাউন" প্রক্রিয়া চালু করা হয়েছে। যার অর্থ মানুষের ঘর-বন্দী হয়ে থাকা। কিন্তু মানুষের জীবিকা ঘর-বন্দী অবস্থায় বিপন্ন। বিশ্বের এক গুরুত্বপূর্ণ বিশ্লেষক সংস্থা জানিয়েছে এই পরিস্থিতি থেকে মুক্তি পাবার পরেও সাধারণ মানুষের অর্থনৈতিক অবস্থা এক চরম বিপর্যয়ের মুখে পড়বে। যে অবস্থাটা কেবল দ্বিতীয় বিশ্বযুদ্ধের পরবর্তী সময়ের সঙ্গে তুলনীয়। এই ভারতবর্ষেই প্রায় চল্লিশ কোটি মানুষ নেমে যাবেন দারিদ্রসীমার নিচে।

স্বভাবতই মনে হতে পারে, এইরকম এক কঠিন সময়ে আমি হঠাৎ সংকেতের ভাষ্য লিখতে বসলাম কেন! যদি সম্পূর্ণ নতুন কোনো বিষয় হত - সেক্ষেত্রেও না-হয় কথা ছিল। সংকেতের অজস্র আধুনিক ভাষ্যও তো গত সওয়া-একশ বছর ধরে পৃথিবীতে নানান আকারে, ইঙ্গিতে, ব্যাখ্যায়, রচিত হয়েছে। তাহলে এই কাজে কেন হাত দিলাম? এই সময় পৃথিবীতে প্রয়োজন ডাক্তারের, নার্সের, স্বাস্থকর্মীর, বৈজ্ঞানিকের, অর্থনীতিবিদদের, আরও সংশ্লিষ্ট পেশায় নিযুক্ত পেশাদারী মানুষের। এই অবস্থায় সংকেততত্ত্ব কোন কাজে লাগবে। না, ঠিক এই অবস্থায় কাজে সত্যিই লাগবে না। আমি যে রচনায় হাত দিয়েছি - তা তড়িঘড়ি শেষ করে পৃথিবীর মানুষের হাত তুলে দেবার সংকল্পও তাই আমার নেই। ভাষাতত্ত্বের ছাত্র হিসেবে আমি খেয়াল করলাম, ভাষার নানান উপকরণ মানুষের নিত্য ব্যবহার্যের তালিকায় থাকলেও সেসব উপকরণ জীবন-দায়ী ওষুধের মতো বা খাদ্য-বস্ত্র-বাসস্থানের মতো প্রাথমিক চাহিদার বিষয়ও নয়। কিন্তু খেয়াল করলেই দেখা যাবে, ব্যাকরণের গুরুত্বপূর্ণ শাখাগুলো, অর্থাৎ ধ্বনিতত্ত্ব, পদানুতত্ত্ব, বাক্যতত্ত্ব, আধেয়তত্ত্ব - ইত্যাদি সমস্তরকম বিদ্যার কাজ এই অবস্থাতেও মজুত রয়েছে। একটা দৃষ্টান্ত দিলেই ব্যাপারটা পরিষ্কার হবে পাঠকের কাছে। এই যে এই আলোচনাতেও বারবার করে উঠে আসছে - ভুয়ো-খবরের প্রসঙ্গ। মানুষই তো আসলে মানুষের সবচেয়ে বড় শত্রু। এই কঠিন পরিস্থিতির মধ্যে বসেও একদল মানুষ অক্লান্তভাবে তথ্য-প্রযুক্তির অভাবনীয় উন্নতিকে কাজে লাগিয়ে নানান রকমের ছ্যাবলামি ও আতঙ্ক ছড়িয়ে চলেছেন। বিজ্ঞান অভিশাপ না আশীর্বাদ - এই বিষয়ে, হিরোসিমা-নাগাসাকি কাণ্ডের পর, আরও অনেকবার, অনেক কারণে, ভাববার অবকাশ এসেছে মানুষের কাছে। প্রতিবারই আশীর্বাদ পরাজিত হয়েছে অভিশাপের কাছে। বিশেষত, মাঝখান থেকে প্রযুক্তি এসে বিজ্ঞানের আসনে বসেছে এবং বানিয়াদের সঙ্গে গভীর হৃদ্যতা স্থাপন করেছে। এবং মানুষ ক্রেতা হিসেবে সস্তায় (বিলাশ সামগ্রী) তথ্য-প্রযুক্তির নানা যন্ত্রপাতি হাতে পাচ্ছেন এবং তার যথেচ্ছ ব্যবহার করছেন। এখন এই ভুয়ো খবর নিয়ে সরকারি মহলে নানা সতর্কতা নেওয়া হচ্ছে। কিন্তু সাধারণ মানুষের কাছে তার কোনো সুরাহা এখনই নেই। ভাষাতত্ত্ব কিন্তু তার সাজ-সরঞ্জাম দিয়ে - একটা "ভুয়ো খবর" বিশ্লেষণ করে ভাষাতাত্ত্বিক পন্থায় বলে দিতে পারে যে এটা "ভুয়ো খবর"। কিন্তু ভাষাতাত্ত্বিকদের কীভাবে কাজে লাগানো হবে - সে ক্ষমতা অন্যের হাতে। সরকার না বুঝলেও, বানিয়া সমাজ এই কথা আগেই বুঝে গেছে। ফলে বহু ভাষাতত্ত্বের ছাত্র, ভাষাতাত্ত্বিক তথ্য নির্মাণ ও বিশ্লেষণের কাজে নিযুক্ত হয়েছেন বিভিন্ন কোম্পানিতে।

সংকেততত্ত্বের কাজ আরও এক-কাঠি ওপরে। প্রথমত, সংকেততত্ত্ব এমন এক বিদ্যা যা কেবল ভাষার তথ্য নিয়েই কথা বলে না। দুনিয়ার তামাম কর্মকাণ্ডের ও দুষ্কর্মের ঢাকনা সরিয়ে দিয়ে মানুষকে ঘটনার মৌলিক উপাদানগুলোকে চিনিয়ে দিতে পারে। দ্বিতীয়ত, সংগঠিত কঠোর নিয়মনিবদ্ধ সরঞ্জাম হিসেবে ব্যাকরণ যা পারে না

বা ব্যাকরণের যা সীমাবদ্ধতা সেগুলো অতিক্রম করে সংকেততত্ত্ব ভাষার ক্ষেত্রেও অনেক ব্যাপক তল্লাসি চালিয়ে "সরাসরি ভাষায় দেখা যাচ্ছে" অথচ "সেগুলো ভাষার মাধ্যমেই জন্মেছে" এমন অনেক জিনিসকে টেনে এনে মানুষের চোখের সামনে বসাতে পারে। ইতিমধ্যেই দুটো নমুনা পেশ করা হয়েছে বর্তমান পরিস্থিতির সাপেক্ষে। প্রথমত; টিভি চ্যানেলে শুনতে থাকা কতকগুলো শব্দবন্ধ যা আমাদের মধ্যে একধরনের "মৃত্যুভয়" তৈরি করছে। কেবল নিজের মৃত্যু নয়, প্রিয়জনের মৃত্যুও, পড়শির মৃত্যুও। যেমন, দেশে "লাফিয়ে লাফিয়ে বাড়ছে সংক্রমণ", ইত্যাদি। দ্বিতীয়ত ভয়-উদ্রেককারী, আতঙ্ক-ছড়ানো খবরের পাশাপাশি ভুয়ো খবর পরিবেশন। অনেক ক্ষেত্রে খবরটা হয়তো সম্পূর্ণ ভুয়ো নয়। ইষৎ বিচ্যুত বা বিকৃত। ওইটুকু বিচ্যুতিতেই ফ্যাক্টের সঙ্গে তার খবরের আকাশ-পাতাল তফাৎ হয়ে যায়। আবার অন্যদিকে, হয়-কে-নয় করে দেওয়া খবরও হুদো হুদো বিলোচ্ছে সোশ্যাল মিডিয়ায়।

সুতরাং কেবল ভাষাতত্ত্ব নয়, মানুষ তার অন্যান্য ক্রিয়া-কর্মের ভেতরের জটিল রহস্যকে উদ্ধার করতে গেলে এই সংকেতন প্রক্রিয়ার সরঞ্জামগুলোকেও কাজে লাগায়। সংকেতের সেই জটিল রহস্যের সূত্রেই ওপরের দুটো দৃষ্টান্তকে বিশ্লেষণ করা দরকার। কিন্তু এই ভাষ্যের ক্ষেত্রে সেই সময় এখনও আসে নি। বর্তমান ভাষ্যে আমি মূলত - সময়ের সঙ্গে সঙ্গে, মানুষের অন্যান্য কাজ-কারবার বিশেষত এই তথ্য-প্রযুক্তির যুগে বা আরও বিশেষ করে বললে এই কৃত্রিম বুদ্ধিমত্তার যুগে মানুষের সংকেতায়ন প্রক্রিয়ার যে বিবর্তিত চেহারা তার কিছু সূত্র আবিষ্কার করার চেষ্টা করছি। রলাঁ বার্ত যেমন একজন নিগ্রোর ফরাসী ফ্ল্যাগ স্যালুট করার মধ্যে দিয়ে দ্বিতীয় স্তরের সংকেতায়নের ফলে উদ্বৃত্ত মানের প্রতি নজর দেন - আমরাও তেমন কৃত্রিম বুদ্ধিমত্তার যুগে মানব-সংস্কৃতির হঠাৎ পরিবর্তনের সঙ্গে সঙ্গে মানুষের সংকেতনের মধ্যে মানে উৎপাদন ক্ষমতার যে জটিল বিন্যাস গড়ে উঠেছে তার প্রতি নজর রাখব।

জগতের সব কিছুই আসলে সংকেত - একথা বলে দিলে একদিক থেকে ঝামেলা মিটে যায় কিন্তু আরেকদিক থেকে ঝামেলা বাড়ে। যে দিকে ঝামেলা বাড়ে সেদিকটা নিয়েই তো কথা বলা দরকার। এক্ষেত্রে জন সার্লের কথা প্রণিধানযোগ্য। বিজ্ঞানে, দর্শনে ও অন্যত্র কোনো কিছুর বিবরণ দিতে গেলে দুটো পরিভাষার সাহায্য নেওয়া হয়। এক হচ্ছে "অবজেক্টিভিটি" বা "বস্তুনিষ্ঠতা" আর এক হচ্ছে "সাবজেক্টিভিটি" বা "বিষয়ীনিষ্ঠতা" বা আরও চেনা বাংলায় বলতে গেলে "আত্মনিষ্ঠতা"। আগেই বলেছি, সব ধারণা বা নামের সরাসরি বাংলা তর্জমা করা মুশকিল। তাও পদে পদে ওই সেতু বাঁধার কাজ করে এগিয়ে চলতে হবে - তাহলেই বর্তমান ভাষ্যের উদ্দেশ্য খানিকটা অন্তত সফল হবে। সার্ল বলছেন, জগতের কথা তুললে - দুটো ধারণার পার্থক্যের কথা মনে রাখা দরকার: "এপিস্টেমিক" বা "জ্ঞানসম্বন্ধীয়" ও "অন্টোলজিকাল" বা "সত্তাসম্বন্ধীয়"। জগতের যা জ্ঞানসম্বন্ধীয় অস্তিত্ব সেটা বস্তুনিষ্ঠ হতে পারে বা আত্মনিষ্ঠ হতে পারে। রবীন্দ্রনাথ জন্মেছিলেন ১২৬৮ বঙ্গাব্দের ২৫শে বৈশাখ। এই জ্ঞান যে আমাদের হয়েছে সেটা বস্তুনিষ্ঠ জ্ঞান বা সার্লের ভাষায় এপিস্টেমিক অবজেক্টিভিটি আর "রবীন্দ্রনাথ আমায় আমার জীবনের সকল দুঃখে ও কষ্টে উজ্জীবিত করেন" বা আরও সোজা কথায় "রবীন্দ্রনাথ একজন প্রতিভাবান মানুষ ছিলেন" - এই জ্ঞান আমাদের আত্মনিষ্ঠ জ্ঞান বা এপিস্টেমিক সাবজেক্টিভিটি। কারণ দ্বিতীয় প্রকার জ্ঞান ব্যক্তিমানুষের সাপেক্ষ জ্ঞান। অর্থাৎ ব্যক্তিমানুষের নিজস্ব উপলব্ধি থেকে সেই জ্ঞানের জন্ম। সেক্ষেত্রে কারুর মনে হতেই পারে যে রবীন্দ্রনাথ তাঁকে উজ্জীবিত করেন না বা রবীন্দ্রনাথ প্রতিভাবান মানুষ ছিলেন না। আর-এক

ধরনের জ্ঞান আছে যেটা সত্তাসম্বন্ধীয় জ্ঞান। সেই জ্ঞানের ক্ষেত্রেও বস্তুনিষ্ঠতা এবং আত্মনিষ্ঠতার প্রশ্ন উঠতে পারে। যেমন, "হিমালয়ের দ্বিতীয় সর্বোচ্চ শৃঙ্গ কাঞ্চনজঙ্ঘা" - এটা সত্তাসম্বন্ধীয় বস্তুনিষ্ঠ জ্ঞান ওরফে অন্টোলজিকাল অবজেক্টিভিটি আর "আমার খুব মাথার যন্ত্রণা হচ্ছে" - এই জ্ঞান আমার উপলব্ধিজাত সত্তাসম্বন্ধীয় আত্মনিষ্ঠ জ্ঞান বা অন্টোলজিকাল সাবজেক্টিভিটি।

এই যে বাস্তব জগতের একটা ট্যাক্সনমি তৈরি করা গেল – তাতে বোঝা গেল, বিষয়ী বা আত্মনিষ্ঠতার সাপেক্ষে ও বিষয়ী-নিরপেক্ষতার সমস্ত পর্যায়েই মানুষকে জ্ঞান অর্জন করতে হয় সংকেতের মধ্যে দিয়ে। অন্যদিকে যা-কিছু জ্ঞানসম্বন্ধীয় বা সত্তাসম্বন্ধীয় বস্তুনিষ্ঠ জ্ঞান - সেটাও বিষয়ী-নিরপেক্ষ হতে পারে না। এই সমস্ত বিষয়ও বিষয়ীর জ্ঞানের মধ্যে দিয়েই প্রকট হয়। যেই বললাম, 'রবীন্দ্রনাথ জন্মেছিলেন', অমনি বিষয়ীর ঐতিহাসিক ও সাংস্কৃতিক অভিজ্ঞতার ডাক পড়ল। তেমনই যখনই "এভারেস্ট"-এর কথা উঠবে কিংবা "ছোটনাগপুরের মালভূমি" প্রসঙ্গ আসবে, তখনই ডাক পড়বে সাংস্কৃতিক অভিজ্ঞতার। কারণ গোটা জগতই তো কথার মধ্যে দিয়ে তো জ্ঞানে পরিণত হয়। "চরম" জ্ঞানসম্বন্ধীয় বা সত্তাসম্বন্ধীয় বস্তুনিষ্ঠতা বলে যদি কিছুকে মেনে নিতে হয় তাহলে - এমন এক বিশ্ব কল্পনা করতে হবে যেখানে ভাষা বলে কিছু নেই। সেটা কল্পনা করাও মুশকিল কারণ আমাদের কল্পনাগুলোও তো ভাষার উপাদান দিয়ে গঠিত। বিমূর্ত ভাষাহীন কল্পনা বলে কিছু হয় না। সাংস্কৃতিক স্তরে ভাষার অভিজ্ঞতা হয় নি এমন ব্যক্তি নেই। বা যদি তর্কের খাতিরে ধরে নেওয়া যায় - যে সদ্যজাত একজন মানবশিশুর সেই অভিজ্ঞতা প্রথমেই হয় না। তাহলেও বলতে হবে যখন সে নিজেকে অমুক সংস্কৃতির অঙ্গ হিসেবে ভাবতে শেখে নি, তখন তার "কল্পনার গঠন" কেমন হবে – সেটা পরীক্ষা করার কোনো উপায় নেই। সুতরাং যে জগৎ আছে অথচ যে-জগত আমাদের কাছে অজ্ঞাত তাকেই একমাত্র সংকেত দখল করতে পারে নি - একথা বুঝতে হবে। অর্থাৎ অন্যভাবে বলতে গেলে বলতে হয় - মানুষ এই সংকেতের সাহায্যেই আত্মনিষ্ঠ জগত ও বস্তুনিষ্ঠ জগতের সঙ্গে তার সম্পর্ক স্থাপন করে। শুধু মানুষ বললে ভুল হবে। সমস্ত জীবজগতের ক্ষেত্রেই কথাটা সত্যি। পর্ণমোচী বৃক্ষের পাতা ঝরার মরসুমে পাতা ঝরে যাওয়াটাও একটা সংকেত। মানুষের সঙ্গে কেবল বাকি জীবজগতের ফারাকটা হল এই যে মানুষের সংকেতন প্রক্রিয়া বিবর্তনের মধ্যে দিয়ে ক্রমশ জটিল থেকে জটিলতর হয়েছে। সেখানে আত্মনিষ্ঠ জগতের মূল্য সবচেয়ে বেশি এবং পারস্পরিক ভাব বিনিময়ের ক্ষেত্রে মানুষের বেলায় সংকেতন প্রক্রিয়ার একটা থাকবন্দী স্তর গঠিত হয়। সেসব অন্যান্য জীবের বেলায় ততটা হয় না। কোনো-কোনো প্রাণীর ক্ষেত্রে থাকবন্দী সংকেতন প্রক্রিয়া যে একেবারেই সম্পন্ন হয় না - সে কথা হলফ করে বলতে না-পারলেও, এইটুকু বলা যায় যে মানুষের মতো ব্যাপক নয় সেই সংকেতন।

ভার্চুয়াল শব্দের বাংলা সমগোত্রীয় শব্দ অপার্থিব। এই "অপার্থিব" শব্দটা বাঙালিরা সাধারণত, এমন কিছু বর্ণনার জন্য বেছে নেয় যা চারপাশের চেনা জগতের প্রচলিত চেনা কথা দিয়ে বলে ওঠা যাচ্ছে না। বা বাস্তবিক বর্ণনার অতীত এমন কিছু। যেমন, অপার্থিব সৌন্দর্য বা অপার্থিব রূপ। সে-দিক দিয়ে দেখলে ভার্চুয়াল রিয়্যালিটি মানে গিয়ে দাঁড়ায় "চতুষ্কোণ বৃত্তের" মতো কিছু একটা। সঙ্গে সঙ্গে পাঠক বলবেন, কেন আমাদের সংস্কৃতিতেও তো শূন্যগর্ভ শব্দ বা এম্পটি ওয়ার্ডের মতো জিনিস আছে - যেখানে সংকেতকের সমান্তরাল কোনো সংকেতিত নেই ঠিকই কিন্তু তার অস্তিত্ব আছে। যেমন, সেই শূন্যগর্ভ শব্দ বিষয়ে আমার যে জ্ঞান তা আমার অনুমান এবং সেই অনুমান একেবারে অবাধ নয়, আমার সাংস্কৃতিক নির্মাণ। আর সেই অনুমান আসলে বাস্তবের অন্যান্য অস্তিত্বশীল

সংকেতিতর মধ্যে দিয়েই গড়ে ওঠে। যেমন, চতুষ্কোণ বৃত্তের ক্ষেত্রেও - মানুষের মনে একধরনের হতাশা তৈরি হয় ঠিকই - কিন্তু "চতুষ্কোণ" ও "বৃত্ত" - এই দুই অস্তিত্ব সম্বন্ধে মানুষের অভিজ্ঞতা থেকে হওয়া জ্ঞান রয়েছে ঠিকই কিন্তু "চতুষ্কোণ" যখন বৃত্তের বিশেষণ হিসেবে কাজ করবে তখনই সেটা "অসম্ভব"-এর তকমা পাবে। "ব্যাঙ্গমা-ব্যাঙ্গমী"-র প্রসঙ্গটা একটু আলাদা। কারণ, রূপকথায় ব্যাঙ্গমা-ব্যাঙ্গমীকে বর্ণনা করে দেওয়া হয়েছে – "পাখি হিসেবে যারা মানুষের মতো কথা বলে"। এই বর্ণনার মধ্যে দিয়ে মানুষ তার বাস্তব অভিজ্ঞতা থেকে পাওয়া জ্ঞান দিয়েই ব্যাঙ্গমা-ব্যাঙ্গমীর ছবি কল্পনা করে নিতে পারে। তাই "ব্যাঙ্গমা-ব্যাঙ্গমী" স্ব-ব্যাখ্যাত সংকেতক। কিন্তু "ভার্চুয়াল রিয়্যেলিটি" কথাটায় মানুষের বাস্তব অভিজ্ঞতা বলে আলাদা করে কিছু নেই বা "অপার্থিব বাস্তব" বলে কিছু হয় না। "ভার্চুয়াল" বা "অপার্থিব" বিশেষণ হিসেবে যেভাবে ইংরিজিতে এবং বাংলায় কাজ করে, তার রূপ-গুণদানকারী "রিয়্যেলিটি" বা "বাস্তব" সেভাবে কাজ করে না। অথচ "অপার্থিব বাস্তব"-এর সবকিছুই বাস্তবের উপাদান দিয়ে গড়া – তাই তার "অসম্ভাব্যতা", "চতুষ্কোণ বৃত্ত"-এর থেকে প্রকৃতিগতভাবে আলাদা। ভারতীয় দর্শন শাস্ত্রে এইসব নিয়ে বিস্তর আলোচনা আছে। সবই সংস্কৃত ভাষায় নয়। বাংলা ভাষাতেও বিস্তর আলোচনা রয়েছে।

৭. বর্তমানে সংকেতের কাজের এলাকা

আমরা এতক্ষণ যে সমস্ত আলোচনা এগিয়েছি - দেখেছি মানুষের জীবনের জটিলতা বৃদ্ধির সঙ্গে সঙ্গে সংকেতভাষ্যেরও জটিলতা বৃদ্ধি হয়েছে। প্রথমে সংকেতনের গোড়ার কথা - অর্থাৎ সোস্যুর যখন মৌলিক একক হিসেবে সংকেতের ট্যাক্সনমি করছেন - সে ট্যাক্সনমি একেবারে বিজ্ঞানের নিয়ম মেনে - দ্বিস্তরীয় বা বাইনারি। সংকেতকে মানুষের কমিউনিকেশনের মৌলিক একক হিসেবে যখন সোস্যুর ব্যাখ্যা করছেন তখনই ভাষা-সংকেত অনেক বেশি জটিল হয়ে উঠেছে। প্রাকৃতিক সংকেত যেমন মেঘ করেছে অর্থাৎ বৃষ্টি হতে পারে-র মতন সহজ সেতু হিসেবে সে আর কাজ করতে পারছে না। একটা নির্দিষ্ট স্তর অবধি বলা যায় যে - যে-অবধি মানুষ এই গ্রহের সঙ্গে তার প্রাথমিক সম্পর্ক পাতিয়েছে বস্তুর এবং তার নিজের অনুভূতিগুলোর নামকরণের মধ্যে দিয়ে। তখন কেবল চিনতে শেখার কাজ হয়েছে এই সংকেতনের মধ্যে দিয়ে। এইটা গাছ, এইটা আগুন, এইটা জল আর অন্যদিকে এইরকম অনুভূতি হলে তখন বলব দুঃখ, এইরকম হলে বলব আনন্দ, এইরকম অনুভূতির জন্য আমার চোখ দিয়ে জল বেরোলো আর আমি মুখ দিয়ে সেই অনুভূতি অর্থাৎ যন্ত্রণাসূচক আওয়াজ বের করলাম - এই পুরো ঘটনাটাকে বলে কান্না, ইত্যাদি। এই প্রাথমিক বা একেবারের গোড়ার দিক থেকেই সংকেতন প্রক্রিয়া সহজ থাকতে পারে নি। এখানে দুটো কথা পাঠককে খেয়াল রাখতে বলবো - প্রথমত মানুষ নিজের অজান্তেই বর্গ তৈরির প্রক্রিয়া শিখে গিয়েছিল নামকরণের মধ্যে দিয়ে। তাই এখনকার বর্গীকরণের যে রাজনৈতিক প্রেক্ষাপট তার অতীতে কিন্তু একধরণের অনিচ্ছাকৃত কর্মের সূত্র কাজ করছে। যেমন; মানুষ - কাণ্ড, শাখা-প্রশাখা, ও পাতাওয়ালা একটা অস্তিত্ব দেখে বলল এটার নাম 'গাছ'। কিন্তু সেই কাণ্ড, শাখা-প্রশাখা এবং পাতাওয়ালা অস্তিত্ব তো এককরম নয়। ওই-রকম কাছাকাছি আকারের সব-রকম জিনিসকেই মানুষ বলতে লাগলো গাছ। কিন্তু সাদৃশ্যের পরিধিটাকে কতটা প্রসারিত করা হবে - সেটাও মানুষের বিশেষ ব্যাপার। জগতটাকে কেবল ভাষা দিয়ে অবাধ নামকরণ নয়, তার সঙ্গে সঙ্গে - সংকেতিত বস্তুর বর্গ তৈরির ক্ষেত্রে বস্তুতে-বস্তুতে সাদৃশ্যের ব্যাখ্যা করতে মানুষ শিখে গেল অধিভাষার সাহায্যে। এই অধিভাষার আবিষ্কারই মানুষের শ্রেষ্ঠতম কৃতিত্বগুলোর মধ্যে অন্যতম। অর্থাৎ, গাছ বর্গের ভেতরে একই ধরণের বট ও অশ্বত্থকেই কেবল সে অন্তর্ভুক্ত করল না - লতা, গুল্ম, ফুলের গাছ, এমনকি সম্পূর্ণ ভিন্ন আকারের নারকোল, তাল, খেঁজুরকেও সে গাছের মধ্যে অন্তর্ভুক্ত করতে পারলো ওই অধিভাষা দিয়ে - সরল

নামকরণ, সংকেতক 'গাছ' ও সংকেতিত 'গাছ'-এর সম্পর্কের বৈশিষ্ট্য ব্যাখ্যার মধ্যে দিয়ে। একই সঙ্গে সে চালিয়ে গেল নামকরণও। অর্থাৎ নামকরণের ভেতরে আরও নামকরণ। আমগাছ, জামগাছ, জামরুল গাছ, মেহগনি গাছ, কদম্ব গাছ, তালগাছ, আরও কত কী! গাছকে যদি কেবল প্লান্ট হিসেবে ধরি তাহলেও তার সংখ্যাটাও পৃথিবীতে চার লক্ষের কাছাকাছি। সে-যাই হোক, আমাদের দৃষ্টি এখন অন্যত্র। বর্গ তৈরির ক্ষেত্রে, আবার অনুভূতির দিকগুলোও এসে পড়ে। যেমন, আত্মীয়বিয়োগের কান্না, আর সত্যজিত রায়ের পথের পাঁচালী দেখে কান্না একরকম নয়। তবু এই দু-রকম কান্না, আরও অনেক রকম কান্না, কান্নাই। তার মানে এখানে তিনটে জিনিস খেয়াল করবার মতো। এক হচ্ছে নামকরণ, দুই হচ্ছে বর্গ তৈরি করা, তিন হচ্ছে একটা কর্তা বা বিষয়ীর প্রত্যক্ষ অভিজ্ঞতার মধ্যে দিয়ে উপলব্ধি বা শারীরিক পরিবর্তনজনিত উপলব্ধির একটা বাস্তব অবস্থা।

একটু আগেই আমরা আলোচনা করেছি যে, এই রকম "বাস্তব অবস্থা" বলে দিলে কিছু বোঝা যায় না। মানুষের বস্তুনিষ্ঠ ও আত্মনিষ্ঠ জ্ঞানের মধ্যে দিয়েই বাস্তবকে আমরা নির্মান করি মাত্র। তাহলে সংকেতনের যে সমতলটার কথা ভাবা হচ্ছিল সেটাও আসলে ব্যক্তিনিরপেক্ষে ভাষা-নিরপেক্ষ বাস্তব নয়। সংকেতনের জটিলতা আরও বাড়ল যখন একদিকে মানুষের ভাষায় নামকরণ এবং অন্যদিকে তার নানান কর্মকাণ্ডের ভাষা-ভিত্তিক আত্মপ্রকাশকে বিচার করতে চাওয়া হল। এদিকে আদিমতম সংকেতন প্রক্রিয়াকে ব্যবহার করার অভ্যেসবশত ওই 'নামকরণ', মানুষের ওপর প্রভাব বিস্তার করে বসে আছে। সে বিভিন্ন অবস্থাকে বর্ণনা করার জন্য একাধিক শব্দ বা শব্দমালা ব্যবহার করেও নাম দিতে পারছে। আমরা যে প্রবাদ প্রবচনগুলো শুনি সেগুলো সেইরকম এক-একটা নামকরণ। "ঘুঁটে প'ড়ে গোবর হাসে" – একটা আস্ত নাম। একটা বিশেষ অবস্থায় পড়লে মানুষ ওই নাম ব্যবহার করে। তেমনই; "বুক ফেটে দরজা," "কানা ছেলের নাম পদ্মলোচন," "আল্লাদে আটখানা," এইসবই এক-একটা নাম। কিন্তু রোজকার ভাব বিনিময় মানুষ শুধু নামের ওপর নির্ভর করে করবে কী করে?

তাই মানুষকে আবিষ্কার করতে হল ভাষিক সংকেতনের অন্যান্য সদস্যকেও। মানুষকে সামগ্রিক ভাষা ব্যবহার করবার সময় তো কেবল "নাম" বা "শব্দ" উচ্চারণ করলে চলে না, তাকে আস্ত আস্ত "বাক্য" উচ্চারণ করতে হয়। সেইসব জায়গায় ভাষার সহস্র ধারা, সহস্র মুদ্রা - কত নিয়মের ব্যাপার এই সব কিছু সংকেততত্ত্ব দিয়ে সামলাতে গেলে সহজ সমীকরণ দিয়ে এমনিতেই কাজ হয় না। তার ওপর "কৃত্রিম বুদ্ধিমত্তা"-র নবতম সংযোজন "অপার্থিব বাস্তব"। সুতরাং কৃত্রিম বুদ্ধিমত্তার যুগে সংকেতন প্রক্রিয়ার রহস্য আরও কয়েকগুণ বেশি জটিল হবে এটাই তো স্বাভাবিক।

তাহলে সংকেতনের যে প্রাথমিক প্রয়োজনীয় কাজের কথা দিয়ে আমরা এই উপসংহার টানার চেষ্টা করছিলাম যেটা বার্তে এসে দেখা গেল দ্বিতীয় স্তরের এক খেলা তৈরি করছে - সামাজিক, রাজনৈতিক ও অর্থনৈতিক কেচ্ছাগুলো মানুষের ভাষায় বা অন্যান্য অভিব্যক্তিতে, ছবিতে, ফটোগ্রাফে - এবং সেইসঙ্গে তৈরি হচ্ছে সংকেতের নানান ফ্যাঁকড়া, ইত্যাদি। কৃত্রিম বুদ্ধিমত্তার জগতে সেটা তৃতীয় স্তরে উন্নীত হবে এমন সহজ করে ভাববার অবকাশও আর নেই। কারণ কৃত্রিম বুদ্ধিমত্তা তো মানুষের বুদ্ধিমত্তার উর্ধে উঠে কোনো বিশ্ব রচনা করছে না। সে মানুষের বুদ্ধিমত্তার জগতেই ঢুকে পড়ছে আর সেটার ভেতরে ঢুকে খিচুরি বানিয়ে তুলছে - অথচ সেটার ভেতরে

কোনো রকম আক্ষরিক অস্বাভাবিকতা চোখে পড়ছে না। সেই বিশ্বের দিকে সংকেততত্ত্বকে নজর দিতে গেলে - বাস্তবের ওই অখণ্ডতাকে ভেঙে টুকরো করে ফেলে কাজ এগোতে হবে।

৭.১ দ্রষ্টব্য: লাজারাতো ২০১৪; প্রথম ও দ্বিতীয় অধ্যায়

"বাস্তব" বলে যা একনাগাড়ে বলে যাচ্ছি সেই শুরুর থেকে, সেটা আসলে কী ব্যাপার? এ যাত্রায় তো ধরে নিয়েছি আমার "অবজেক্ট অফ স্টাডি" অর্থাৎ ভাষ্য রচনার বিষয়বস্তু হচ্ছে "বাস্তব" আর সরঞ্জাম ও কৌশল নিচ্ছি "সংকেততত্ত্ব" থেকে। বাস্তবের ভাষিক চেহারার বর্ণনাও দিয়েছি। এও বলেছি, যে শরীরটাকে আমরা বাস্তব বলে দেখতে পাচ্ছি সেটা কীভাবে ভেতরে ভেতরে যেন অন্য শরীরে পরিণত হচ্ছে, আগের শরীরের অবয়বটাকে অভিন্ন রেখে। কিন্তু বাস্তবের ভেতরের মেকানিজমটা সম্বন্ধে কিছুই বলি নি। কারণ সে বিষয়ে অধিক বলার সুযোগ এই রচনায় নেই। আমি সে বিষয়ে পারদর্শী নই, তবে আগ্রহী শিক্ষার্থী। কেননা ওই মেকানিজমটা তৈরি করে "উৎপাদন ব্যবস্থা" এবং সেই উৎপাদন ব্যবস্থার সঙ্গে মানুষের সম্পর্কের প্রকৃতি। যেমন, ধরুন যাকে পুঁজিবাদ বলে চলেছি সেও তো এক ধরনের অতিনির্ণয় - সেই পুঁজিবাদের যদি আদর্শ সংজ্ঞা দিতে হয়, তবে বলতে হবে পুঁজিবাদ এক ধরনের অর্থনৈতিক উৎপাদন ব্যবস্থা - যে ব্যবস্থায় বানিজ্যের কেন্দ্রীয় ক্ষমতা রাষ্ট্রের হাতে থাকে না, থাকে ব্যক্তিগত মালিকানার হাতে। সংজ্ঞা দেওয়া মানেই অতিনির্ণয়। আর এই অতিনির্ণয়কে যদি সামান্যতম পথ ছেড়ে দিই তাহলে তো আমার এখনকার প্রকল্পও ভেঙে পড়বে। পরস্পরবিরোধিতায় ভরে যাবে পাঠ্য। একটা শক্তিশালী বিশ্বাসের ভিতের ওপর দাঁড়িয়ে থাকা ঘর ভেঙে আমি আরেকটা ঘর বানাবো বলে এ রচনায় হাত দিই নি। বরং মুক্তির চিন্তা করেছি সেই বদ্ধ অথচ সাজানো ঘরে আটকে থাকা মানুষের। এখন বাস্তব কী - এই প্রশ্নের বস্তুনিষ্ঠ উত্তর দিতে গেলে বর্তমান প্রকল্পটাই স্ববিরোধী হয়ে উঠবে।

কিন্তু একটু চিন্তা করলেই বোঝা যায়, মানুষের ভাষাতেও একধরনের অতিনির্ণয়ের কাজ আপনাআপনি মানে স্বতঃস্ফূর্তভাবেই ঘটে চলে। অতিনির্ণয় ভাষারই একটা সাধারণ বৈশিষ্ট্য। যেমন, একথা তো বলেই-ছি - মানুষ কথায় কথায় যখন বলে, "আজকাল নির্বিচারে গাছ কাটা হয়" তখন কি কী "গাছ" সেটা ভেবে কথাটা বলে! বলে না। সে একটা অতিনির্ণিত সমগ্র হিসেবে একটা সংকেত ব্যবহার করে। সেটা আটপৌরে ভাষার বৈশিষ্ট্য। কিন্তু যখন আমি কোনো বিশেষ ঐতিহাসিক তাৎপর্যবাহী ধারণার কথা বলব, সঙ্গে তার যে সংজ্ঞা-নির্ধারণের প্রশ্ন উঠবে সেটা আটপৌরে ভাষার মতো নয়। তাই পুঁজিবাদের মতো ধারণাকে এক-রকম নেতিবাচক দিক থেকে দেখবার চেষ্টা করছি। খেয়াল করবেন আমি বলেছি, বাজারে সবজি বিক্রি যিনি করেন তিনি পুঁজিপতি কিনা সেটা এই আলোচনায় দেখা বিবেচ্য নয়। বিবেচ্য কেবল সেইটুকু যা বাস্তব ওরফে ভাষিক বাস্তবের ভেতরে ভাইরাসের মতো ঢুকছে, ঢুকে শরীরটাকে খতম করে দিচ্ছে না, কিন্তু ভেতরের তন্ত্রগুলোকে একে-একে শেষ করে "বাস্তব" নামক খোলশের ভেতরে যা থেকে যাচ্ছে তা ঠিক "বাস্তব" নয়, অন্য কিছু। এই বিশেষ পুঁজিবাদের নিশ্চয়ই কোনো বিশেষ পরিভাষা থেকে থাকবে, পুঁজিবাদ তো আর একরকম নয়, অনেকরকম। কিন্তু এক্ষেত্রে তার নাম চেনাটা বাড়তি। কিন্তু এই-যে বাস্তবের খোল-নলচে অটুট রেখে তাকে "অন্য কিছু" করে তোলার কথা বললাম সেই অন্য কিছুর নাম জানাটা জরুরি কারণ সেই বাস্তবের শরীরে থেকে যাওয়া "অন্য কিছু"-টাই এই রচনার বিশ্লেষ্য। ওই অন্যকিছুটার নাম পুঁজিবাদেরই দেওয়া: "ভার্চুয়াল রিয়েলিটি" যাকে আদর করে বলেছি "অপার্থিব বাস্তব"। পাঠকের কাজটা অনেকটাই অনুমানের ওপর নির্ভর করবে এই পাঠ্যের ক্ষেত্রে।

প্রথমেই পুরোনো কথা মনে রেখে বলতে হবে এই অপার্থিব বাস্তব ওই বিশেষ পুঁজিবাদের জন্ম দেয় নি বরং এখনকার ওই বিশেষ পুঁজিবাদই তার বিশেষ কৌশল কাজে লাগিয়ে জন্ম দিয়েছে অপার্থিব বাস্তবের, যার ভেতরে ভেতরে নানান ফাঁক-ফোঁকড়। ফাঁক-ফোঁকড়ের মধ্যে দিয়েই পুঁজিবাদ তার উৎপাদনের প্রযুক্তি-নির্ভর প্রক্রিয়ার (টেকনিকাল মোডস অফ প্রোডাকশন) বিপ্লব ঘটাতে পেরেছে।

এখন আমরা যা জানি আর আমরা যা দেখলাম সংকেতত্ত্বের সোস্যুর-নির্ভর ভাষ্য এবং সোস্যুর পরবর্তী ভাষ্যের ভিত্তিতে এখানে কিছু কথা বলা দরকার। আমরা জানি যে সামাজিক অধীনতা বা সোশ্যাল সাবজেকশনের কাজ হল, মানুষের স্বতন্ত্র ব্যক্তি-নির্ভরতা, পরিচয়, লিঙ্গ, পেশা, ইত্যাদির নিরিখে মানুষকে চিহ্নিত করে সামাজিক শ্রমবিভাজনে কার কী ভূমিকা সে বিষয়ে ব্যাখ্যা দেওয়া। এই স্বতন্ত্র মানুষ এই নতুন পুঁজির যুগে আসলে "মানব-পুঁজি" বা "হিউম্যান ক্যাপিটাল" নামক বিগ্রহের অংশ। মিশেল ফুকো (১৯৭৭) গভর্মেন্টালিটির ধারণা দিয়ে বুঝিয়েছিলেন, ওই সরঞ্জাম দিয়ে রাষ্ট্র বা অন্য কোনো আধিপত্য বিস্তারকারী সংস্থা - পরিসংখ্যানের ভিত্তিতে ব্যক্তিস্বাতন্ত্রের (বিষয়ী বা সাবজেক্ট অর্থে) ওপর আধিপত্য বজায় রাখে। আধিপত্য কথাটা ফুকো ব্যবহার করেন নি। এই গভর্নমেন্টালিটিকে বলা যায় – "রাষ্ট্র পরিচালনার শিল্প" বা "আর্ট অফ গভর্নমেন্ট" অথবা "রাষ্ট্রীয় পরিচালনার নীতি বা নির্দেশিকা" যার সাহায্যে সেই রাষ্ট্রে অংশগ্রহণকারী মানুষ - কীভাবে নাগরিক হিসেব নিজেকে প্রমাণ করবে তার সূত্র বলা থাকে। সুতরাং এই গভর্নমেন্টালিটির আওতায় থাকা ব্যক্তিরাও নিজেদের তাদের যে নির্দেশিকা দেওয়া হয়েছে তার "কারক" বা "অ্যাক্টর" হিসেবে কাজ করতে থাকে। ব্যবহারকারী, কর্মী, এবং সর্বোপরি ক্রেতার কাজকর্ম এবং অন্যদিকে পুরুষ-নারী, ছাত্র-শিক্ষক, প্রশাসক-প্রশাসিত, ইত্যাদির ভেদ-জ্ঞান - সামাজিক নিয়মকানুন, এবং অনুশীলনের মধ্যে ঢুকে থাকে। এই ঢুকে পড়া - আসলে উদ্দেশ্য প্রণোদিত। ব্যক্তিমানুষের ওই সমস্ত নানান ধারণা আসলে ব্যক্তিমানুষকে উৎপাদন প্রক্রিয়ায় অংশ নিতে উৎসাহিত করে আবার একই সঙ্গে বিচ্ছিন্ন করে সামাজিক বা লিঙ্গগত শ্রমবিভাজন প্রক্রিয়ার ভেতরেই।

এখানে একটা কথার মানে জেনে রাখা দরকার। কথাটা হল, "যন্ত্রচালিত দাসত্ব" বা "মেশিনিক এনস্লেভমেন্ট" ("machinic enslavement" - এই পরিভাষা ব্যবহার করেছিলেন ডিল্যুজ এবং গুয়াত্তারি সাইবারনেটিক্স ও সয়ংক্রিয় প্রযুক্তির থেকে ধার নিয়ে)। যন্ত্রের ধারণা কী? মনে রাখতে হবে, বিষয়ী ও বস্তু, প্রকৃতি ও সংস্কৃতি - ইত্যাদি বৈপরীত্যগুলোকে পাশে সরিয়ে রাখাই হচ্ছে একমাত্র উপায় যা দিয়ে মানব প্রকৃতি এবং যন্ত্রকে আলাদা করে রাখতে পারা সম্ভব। যন্ত্র মানুষের কতকগুলো কৌশলের অংশমাত্র নয়, বরং মানুষেরই সারবত্তার অংশ। এই যন্ত্রচালিত দাসত্বে কিন্তু আর ওই ব্যক্তির স্বতন্ত্র অস্তিত্ব বা ব্যক্তিনির্ভরতা বা নাগরিকতা থাকে না। এখানে ব্যক্তি নিজেই বানিজ্য, অর্থ-তন্ত্র, গণমাধ্যম, কল্যানকামী রাষ্ট্র, রাষ্ট্রের অন্যান্য সমবায়িক প্রতিষ্ঠান যেমন, স্কুল থেকে শুরু করে ইন্টারনেট পর্যন্ত - সমস্তকিছুর অংশীদার হয়ে ওঠে। যন্ত্রচালিত দাসত্বের মানে একটা তন্ত্রের ব্যবস্থাপনা এবং পরিচালনা। এই দাসত্ব হচ্ছে প্রকৌশলী ও সামাজিক যন্ত্রের একধরনের নিয়ন্ত্রণের কৌশল। এই কৌশল প্রাচীন দাসত্বপ্রথার মতো নয় বুঝতেই পারছেন নিশ্চয়। এটা রাষ্ট্রের বা অন্যান্য সংস্থার খুব সাধারণ এক নিয়ন্ত্রণ ব্যবস্থা যেখানে মেশিনের সাহায্য নেওয়া হয়। কিন্তু বর্তমানে আমার আপনার "বাস্তবিক" অবস্থান বুঝতে গেলে এইটুকুই যথেষ্ট নয়। কারণ যন্ত্রচালিত দাসত্বের কাছে আপনার স্বতন্ত্র অস্তিত্ব-বস্তু, প্রকৃতি-সংস্কৃতি - এই সমস্ত কিছুর কোনো

মূল্যই নেই। মনে রাখা দরকার পুঁজি মানুষের কিংবা ব্যক্তিস্বাতন্ত্রগুলোর মধ্যে কোনো সম্পর্ক হিসেবে কাজ করে না। পুঁজি এমন এক ক্ষমতা-সম্পর্ককে নির্মাণ করে যা আজকের দিনে টিকিয়ে রাখা সামাজিক তন্ত্র এবং তাকে সাহায্য করে প্রযুক্তিগত যন্ত্র। এই অর্থে, এই ব্যবস্থা, ফুকোর প্যানপটিকনের ধারণার কাছাকাছি। কারণ প্যানপটিকনের কাজ হল ক্ষমতাকে স্বয়ংক্রিয় করে ব্যক্তি স্বাতন্ত্রের ওপর আধিপত্য বিস্তার করা। কেন্দ্রীয় ব্যবস্থা হিসেবে প্যানপটিকন প্রত্যেক ব্যক্তির ওপর নজরদারীর কাজ করে।

লাজারাতো দেখিয়েছে, বাস্তবে - অধীনতা বা দাসত্বকরণের দ্বৈত উপস্থিতি দেখতে পাই। একটাকে তিনি বলেছেন, "অনেক মানুষ- আনেক যন্ত্র" এবং আরেকটা বলেছেন, "এক মানুষ-এক যন্ত্র"। লাজারাতো দ্বিতীয় উপস্থিতিকে অর্থাৎ "একটা মানুষ-একটা যন্ত্র"-কে "অনেক মানুষ-অনেক যন্ত্রের" উপাদান বলছেন না। "অনেক মানুষ-অনেক যন্ত্রে" একই সঙ্গে অসংখ্য মানুষ এবং অন্যান্য অসংখ্য অ-ব্যক্তি-নির্ভর জিনিস কাজ করে, তাদের মধ্যে মিথষ্ক্রিয়া চলে। এবং সেই মিথস্ক্রিয়ার সমস্ত কাজের উপাদানগুলোর অভিব্যক্তি ঘটে শুধুমাত্র তথ্যের ভিত্তিতে। অথচ মানব-কেন্দ্রিক তথ্য এই তন্ত্রে অদৃশ্য হয়ে যায়। ফলে এইরকম পরিস্থিতে মানুষের স্বাভাবিক সংকেতন প্রক্রিয়া দিয়ে আর কাজ চলে না, সমস্তকিছু পরিণত হয় 'ইনপুট-আউটপুট' যা মনুষ্যবাচক কাজকর্ম থেকে মানুষকে বিচ্ছিন্ন করে। ওই যন্ত্রচালিত দাসত্বকরণ আসলে বিষয়ী বা বস্তু কোনোকিছুকেই তোয়াক্কা করে না - অথচ বাস্তবে অস্তিত্ব, শংকরায়ন, বস্তুনির্ভরতা-ব্যক্তিনির্ভরতা, ইত্যাদি সম্বন্ধে একধরনের সত্তাতাত্ত্বিক দ্বিধাগ্রস্ততা তৈরি হয়। এখানে বস্তু, যন্ত্র, প্রোটোকল, পরিসংখ্যান চিত্র, সফটওয়্যার - বস্তুনির্ভরতা হারিয়ে ফেলে - বিষয়ী হিসেবে নিজের গড়ে ওঠবার পথ প্রশস্ত করে। পুঁজিবাদের দু-রকম সত্তা থাকে। এক হচ্ছে, "বিষয়ী-নির্ভরতা" আর দুই হচ্ছে "অধীনস্থ করার সত্তা"। বিষয়ী নির্ভরতার কেন্দ্রে থাকে বিষয়ী-নির্ভরতা আর অধীনস্থ করার প্রক্রিয়ার কেন্দ্রে থাকে ব্যক্তিমানুষ।

১৯২০ সাল নাগাদ বিজ্ঞাপন ব্যবস্থার বিকাশ, পরবর্তীকালে দূরদর্শনের বিস্তার, অতঃপর গুগল, ফেসবুক - ইত্যাদিকে ধরা হয় মানব সভ্যতার অভূতপূর্ব কৃতিত্ব হিসেবে। শেষোক্ত দুটো কৃতিত্বের প্রধান জায়গা হল, তথ্যের ভান্ডার (ডেটা ব্যাঙ্ক) গড়ে তোলা। এই তথ্য ভান্ডারকে বলা হয় বিপনন যন্ত্র বা মার্কেটিং অ্যাপারেটাস। এই গুগল বা ফেসবুক আপনার যাবতীয় তথ্য: আপনার সামাজিক পরিচয়, আচরণ, আপনার ভালো লাগা-মন্দ লাগা, প্রিয় সিনেমা, আপনার মনের কথা, আপনি কী খেতে ভালোবাসেন, কী জামা-কাপড় পরতে ভালোবাসেন, কী বই পড়তে ভালোবাসেন, আপনার কেনাকাটার তথ্য - সমস্তকিছু জড়ো করে আপনাদের অবসর বিনোদনের (ফ্রি-টাইম, যেখানে আমরা যে মূল উৎপাদন-ব্যবস্থার সঙ্গে যুক্ত তার ক্ষতি হয় না) মাধ্যমে। তখন আর কিন্তু ব্যক্তিমানুষ ব্যক্তিমানুষ থাকে না, "অপর অস্তিত্ব" হয়ে ওঠে। এই "অপর অস্তিত্ব" আসলে একটা "সংখ্যাতাত্ত্বিক অস্তিত্বমাত্র" - রবীন্দ্রনাথের ভাষায় সাত-পঁচিশের ছড়া। অথচ সেই অপর অস্তিত্বকে চালনা করে ব্যক্তিমানুষ - উৎপাদন ব্যবস্থায় যার আর কোনো অস্তিত্ব নেই। মজার কথা হল, এই যন্ত্রচালিত দাসত্বকরণ কিন্তু আলথুস্যের বর্ণিত সেই "রাষ্ট্রীয় দমন ব্যবস্থা" ("রিপ্রেসিভ স্টেট অ্যাপারেটাস") বা "ভাবাদর্শগত রাষ্ট্রীয় ব্যবস্থা"-র ("ইডিওলজিকাল স্টেট অ্যাপারেটাস") মধ্যে দিয়ে হয় না। এই দাসত্বকরণের প্রধান উপাদান হল, মানুষের দৈনন্দিন কাজকর্ম আর মানব-জীবনের মূল চালিকাশক্তি।

এই কারণে এখন, পুঁজি আর শুধুমাত্র ভাষাতাত্ত্বিক নয়, সংকেততাত্ত্বিক চালিকাশক্তি হিসেবেও কাজ করে। এই বাস্তবের ভিত্তিতে ভাষাতত্ত্ব আর সংকেততত্ত্বের মৌলিক পার্থক্য হল – সংকেততত্ত্ব; শ্রম এবং অর্থের মতো সংকেতের যোগান দেয় - যে "যোগান" বর্তমান উৎপাদন ব্যবস্থার প্রধান শর্ত। তাই সংকেতত্ত্বের দৃষ্টিভঙ্গী থেকে বলা যায়, "সামাজিক অধীনস্থকরণ" এবং "যন্ত্রচালিত দাসত্বকরণ" - আসলে সংকেতের নিজস্ব শাসনতন্ত্রকে প্রাধান্য দেয়। তাই এখন একই সঙ্গে সামাজিক অধীনস্থকরণের মাধ্যমে "চেতনা" ও "উপস্থাপন"-কে গুরুত্ব দেওয়া হয় এবং যন্ত্রচালিত দাসত্বকরণের মাধ্যমে চেতনা ও উপস্থাপনের গুরুত্ব কমিয়ে আনার চেষ্টা চলে। লাজারাতোর নিজের কথায়: In the current crisis, for the majority of the population "work on the self " means no more than the "entrepreneurial" management of unemployment, debt, wage and revenue cuts, reductions in social services, and rising taxes. এখনকার পুঁজি তাই এর উদ্বৃত্ত খুঁজে নেয় অন্যত্র। এখন আর সে - জ্ঞানের ওপর নির্ভর করে না, নির্ভর করে এমন এক ব্যবস্থার ওপর যেখানে ব্যক্তি-নির্ভর প্রয়োগের মাধ্যমে বলা হয় এই হচ্ছে "অবাস্তব শ্রমিক" ("ইমমেটেরিয়াল লেবার") যারা আগের উৎপাদন ব্যবস্থায় - কারখানায় কাজ করা বা কোনো পরিষেবা দেওয়ার ক্ষেত্রে (যেমন বাইরের থেকে আসা বা আঞ্চলিক শ্রমিকরা) যেভাবে কাজ করতো, এখানেও সেই একইভাবে কাজ করবে। অথচ তাদের প্রত্যেকেই যেন ওইসব কাজের জন্য বিনামূল্যে শ্রম দান করবে।

লাজারাতোর ভাষ্যে বলা হচ্ছে, গ্রন্থনবাদ মরে গেছে, অথচ সে যে ভাষার সাহায্যে প্রতিগ্রহ (প্যারাডাইম) তৈরি করে গেছে - সেটা বেঁচে আছে জ্বলজ্যান্ত। মানবোত্তর পৃথিবীতে ভাষার ওপর দিয়ে, "পুঁজির সংকেততত্ত্ব" বুঝিয়ে দেয় "ভাষাতাত্ত্বিক সৃজন" থেকে পৃথিবীটা আসলে পাড়ি দিয়েছে "উৎপাদন এবং যন্ত্রচালিত শাসনের দিকে"। উৎপাদন-ভোগের ভাষা উচ্চবর্গীয় ভাষার অবনমন ঘটিয়েছে, শব্দের মর্যাদা কমিয়েছে। সেই উচ্চবর্গীয় ভাষাই তো এতদিন সমস্ত ভাষাকে পথ দেখিয়েছে। যে সমস্ত প্রতিষ্ঠান ভাষার বিকাশে, ভাষার সমন্বয়সাধনে, ভাষার উদ্ভাবনের জন্য কাজ করতো সেগুলো আর বেশিদিন শিক্ষা প্রতিষ্ঠান রইল না, কারখানা হয়ে গেল। ভবিষ্যতের আঞ্চলিক ও আন্তর্জাতিক ভাষা হবে এমন এক বিশ্বকে সংকেতিত করবার ভাষা - যে বিশ্বের সমন্বয় ঘটবে বানিজ্যশিল্প আর প্রযুক্তির মধ্যে দিয়ে। সুতরাং মানুষের কমিউনিকেশন আর মানুষের থাকবে না। ভাষাতাত্ত্বিক বিপ্লবের এ-এক ঠিক বিপরীত জগত। তখন, পরিকাঠামোর ভাষা এবং মানবিক ভাষাকে দমন, ইত্যাদির বিশ্লেষণ করতে যে সংকেততত্ত্বকে চিহ্নিত করতে হবে সেটা হবে "উৎপাদন-ভোগের সংকেততত্ত্ব"। কারুর কারুর মতে যদিও – অভূতপূর্ব কিছু কৌশল নতুন করে সক্রিয় করবার ক্ষমতা এখনও, এই আধুনিক সময়েও, মানুষের মধ্যে থেকে গেছে, কিন্তু সেগুলো আর বেশিদিন থাকবে না। সেই ক্ষমতাকে জোর করে শেখানো হবে - বেঁচে থাকার শর্তে এই এই "গাণিতিক প্রতীক" তুমি আয়ত্ত কর। ফলে সেই নতুন কিছু সৃষ্টি করবার মানবিক ক্ষমতার ভাষায় (স্পিচ অর্থে) ফিরে যাবার উপায় থাকবে না আর। যদি আমরা আমাদের সাংস্কৃতিক আচারগুলোকে এই নতুন পরিস্থিতির সঙ্গে খাপ খাইয়ে নিতে শুরু করি তাহলে আর আমাদের ভাষার কোনো মানে থাকবে না। এই ভবিষ্যত বাণী করেছিলেন হানা আরেন্ট।

এখনকার বাস্তবের যে ভাষিক চেহারার দৃষ্টান্ত আমরা তুলে ধরবার চেষ্টা করেছি আমাদের বর্তমান ভাষ্যে - সেখানে আরেন্টের ভবিষ্যতবাণী হুবহু মিলে যায়। প্রযুক্তি আমাদের এমন জায়গায় আজ নিয়ে এসেছে যেখানে ভাষা তার

ক্ষমতা হারিয়েছে। ভাষার ক্ষমতা বলতে আমি তাইই বোঝাচ্ছি - যা সোস্যুর এবং অতঃপর বার্তের ভাষ্য দিয়ে বোঝানোর চেষ্টা করেছি। একটা দৃষ্টান্ত পেশ করা দরকার - এই বক্তব্যের সাপেক্ষে। ধরা যাক সিনেমার কথা। সিনেমা এমন একটা মাধ্যম যেখানে বাস্তবকে প্রকাশ করার জন্য আলাদা করে আর ভাষার দরকার পড়ে না। বস্তু, সত্তা অথবা সম্পর্ক বোঝাতে সিনেমায় আলাদা করে কোনো সংকেত বা প্রতীক ব্যবহারের প্রয়োজনও হয় না। বাস্তব সেখানে যেন নিজেই নিজেকে উপস্থাপিত করে। অন্যান্য শিল্পেও এই শতাব্দীর গোড়ার দিকে ওই সিনেমার দৃষ্টান্তের মতো "রেডিমেড" জিনিস বস্তুনিষ্ঠ হয়ে নিজেই নিজেকে প্রকাশ করতে শুরু করল। যেখানে সংকেত বা ভাষার আর কোনো প্রয়োজনই থাকল না। ওই রেডিমেড জিনিসগুলো আর উপস্থাপন থাকল না বাস্তব হয়ে উঠল। বস্তুগুলো হয়তো নিজেরাই কথা বলতে শুরু করল, আত্মপ্রকাশ করতে শুরু করল। বস্তুর এই প্রাণবন্ত হয়ে ওঠার এই ব্যাপারটা কিন্তু ধ্বনতন্ত্রের মার্কসীয় মোহবদ্ধতার ধারণা নয় বা মানুষের বিচ্ছিন্ন হয়ে পড়ার দৃষ্টান্তও নয়। বরং এ অভিব্যক্তির এক নতুন শাসনতন্ত্র যা পুরোনো সংকেততত্ত্ব দিয়ে আর বুঝতে পারা যাবে না। এটা তো শুধুমাত্র বিষয়ী ও বস্তুর নিজেদের মধ্যে অবস্থানগত পরিবর্তন নয় বা এমন নয় যে বিষয়ী তার কাজকর্মকে বস্তুর মধ্যে দিয়ে সক্রিয় করে তুলতে চাইছে। এ এমন এক প্রক্রিয়া, যেখানে বিষয়ী থেকে তার বিষয়ীত্ব এবং মানব-নির্ভরতা থেকে যন্ত্র-নির্ভরতায় যাবার প্রশ্নকে আর উলটো করে দেখানো যায় না। যেমন, বার্তা প্রেরণের ক্ষেত্রে মানুষের আচরণ, তাৎপর্যবহণকারী সংকেততত্ত্ব, ইত্যাদির সাহায্য আর লাগবে না। বরং শিখন, স্মৃতি, ভাষা, প্রতীক, ডায়াগ্রাম, গ্রাফ, সমীকরণ, ইত্যাদির ওপর নির্ভর করবে বার্তা প্রেরণ। অর্থাৎ কোনো স্বয়ংক্রিয় বাক্যতত্ত্ব এবং অভিব্যক্তির স্তরের সাপেক্ষে যে সংকেততত্ত্ব কাজ করবে বার্তা প্রেরণের ক্ষেত্রে সেই সংকেততত্ত্বের প্রয়োজন হবে।

৮. উপসংহার

এইসব সমস্যার উত্তর (উত্তরণ নয়) খানিকটা পাওয়া যাবে জাঁ বদ্রিয়ারের কাজে। তাঁর কাজে সমাজতত্ত্ব, দর্শন এবং সাংস্কৃতিক সন্দর্ভের এক-রকম স্বকীয় বিশ্লেষণ পাওয়া যায়। তাঁর বিখ্যাত কাজগুলোকে মূলত উত্তর-গ্রন্থনবাদী চিন্তার ফসল হিসেবে দেখা হয়। প্রথম দিকে তাঁর কাজের ঝোঁক ছিল - কীভাবে - সংকেতায়ন এবং সংকেতায়নের ফলে উৎপন্ন মানে - এই দুইয়ের কর্মক্ষেত্রে সংকেতগুলো একে-অপরের সঙ্গে সম্পর্ক পাতায়, এবং ক্রেতা-প্রধান সমাজে কীভাবে ওই সম্পর্ক থেকে উদ্বৃত্ত মানে উৎপন্ন হয়। বদ্রিয়ারের ভাবনাতেও সোস্যুরের প্রভাব স্পষ্ট। কারণ তিনিও মনে করতে মানে তৈরি হয় একগুচ্ছ 'না'-এর পরিপ্রেক্ষিতে। যেমন, এটা বই, এটা মোবাইল নয়, এটা বালতি নয়, এটা আর-কিচ্ছু নয়। তাঁর মতে মানে হল অনেকটা স্ব-নির্দেশক উচ্চারণ। বস্তু, ধারণা, বা পদ নিজেরাই নিজেদের বর্ণনা করে। বদ্রিয়ার মানব-সমাজকে এইরকম স্ব-নির্দেশনার ভিত্তিতে বুঝতে চেষ্টা করেছিলেন, যেখানে বিষয়ীর অবস্থানের গুরুত্ব অপরিসীম। তাঁর ভাবনা মূল প্রতিপাদ্য ছিল, বাস্তব, প্রতীক এবং সমাজের মধ্যেকার সম্পর্কগুলোকে পরীক্ষা করে দেখা। তাঁর কাজে মার্কসবাদেরও প্রভাব ছিল। তাঁর ভাষায় বিষয়ী বা সাবজেক্ট আসলে বস্তুর মাধ্যমে বিমোহিত হয়। তাই মানুষের জীবনকে বোঝা একরকম প্রায় অসম্ভব। বিজ্ঞাপনের মধ্যে দিয়ে মানুষ আসলে বিমোহিত হয়ে এক ভান করা এক বাস্তবের জগতে প্রবেশ করে। সেখানে বাস্তব আর বাস্তব থাকে না।

বদ্রিয়ারের 'দ্য ইন্টেলিজেন্স অফ ইভিল অ্যান্ড দ্য লিসুডিটি প্যাক্ট' (২০০৫) বইটার ভূমিকায় ক্রিশ টার্নার লিখছেন: বদ্রিয়ার ক্রমশই যত দিন গেছে, তাঁর শেষের দিকের কাজগুলোতে তিনি নিজেকে সক্রিয় কর্তা বা বিষয়ী হিসেবে

প্রত্যাহার করে নিয়েছেন। রহস্যকে আড়াল করা বা গোপনীয়তা রক্ষা করার তাগিদে প্রতীকী ক্রম (সিম্বলিক অর্ডার) এবং তার বিভিন্ন বৈচিত্র্যের প্রামাণ্যের স্বাক্ষর হিসেবে যখন ভাষা নিজেই কাজ করতে নামে - তখন বিষয়ী নিজেকে প্রত্যাহার করে বস্তুর চারপাশে ঘোরাফেরা করে। এই সময়ের পর থেকে উৎপাদন সম্পর্কে বদ্রিয়ারের ভাবনার বৈপ্লবিক পরিবর্তন হতে শুরু করে। বিকল্প সামাজিক প্রকল্পগুলো সমস্ত বিমূখ হয়ে উঠেছে বা অভিব্যক্তির সমস্তরকম শক্তিশালী উপায়কেই বিজ্ঞাপন গ্রাস করেছে - এইরকম ধারণাই কেবল বদ্রিয়ারের মধ্যে কাজ করেছে এমন নয়। বরং ভান বা সিমুলেশনের বাড়-বাড়ন্ত বা বাস্তব নিজে এমন এক চরম পর্যায়ে পৌঁছে যায় বলেই বদ্রিয়ার নিজের দৃষ্টিভঙ্গি পালটাতে শুরু করেন। যে পুঁজি একসময় নিরেট বস্তু নিয়ে কাজ করত এখন সেই পুঁজিই প্রত্যেক মানবিক উদ্দেশ্যর ভেতরে সংকেতক ও সংকেতিতর সম্পর্ককে ধ্বংস করে দিচ্ছে। ফলে বাস্তবকে বর্ণনা করার মতো কিছু আর থাকছে না। এই ব্যাপারটাকে বদ্রিয়ার বলেন, প্রত্যেক সূত্রের ক্ষেত্রে বাধা (deterrence of every principle)। এই বাধাই প্রত্যেক প্রাতিষ্ঠানিক বাস্তবকে ভানে পর্যবসিত করে। শুধু ভান নয়, এ এক ধরনের অতি-সক্রিয়তা যেখানে মানেগুলো আর 'না'-এর মধ্যে দিয়ে প্রতিষ্ঠিত হয় না, কেবল এক অনমনীয় চরম অবস্থার সৃষ্টি করে। বদ্রিয়ার বলেছেন, আমাদের এখন কর্তব্য হল: ভান, মিডিয়া ইত্যাদির মধ্যে দিয়ে কীভাবে আমাদের সামগ্রিক সংস্কৃতি একটা অপর পরিসরে রূপান্তরিত হচ্ছে, যে পরিসর সমাপ্তির পরেও আরও কিছু - সেই দিকে খেয়াল রাখা। বস্তুগুলো এখন আর যুক্তিনির্ভর বা দ্বান্দিকভাবে উৎপন্ন হয় না, তাদের কোনো সমাপ্তি নেই - কেবল খাপছাড়া এবং যদৃচ্ছভাবে তাদের বিকাশ ঘটে।

'দ্য ইন্টেলিজেন্স অফ ইভিল'-কে বদ্রিয়ার তাঁর ওই ভাবনা-পর্যায়ের শেষ কাজ হিসেবে দেখেন। শেষের দিকের এই কাজে বদ্রিয়ার সমাজতাত্ত্বিক দৃষ্টভঙ্গি থেকে দেখা একেবারে ছেড়ে দিয়ে অন্য-এক তত্ত্বচিন্তার ধারা তৈরি করলেন। খুব সাধারণ ভাষায় বললে বলতে হয়, তাঁর শেষ বয়সের কাজগুলো হচ্ছে প্রাসঙ্গিক ও সাম্প্রতিক ঘটনার দার্শনিক বিশ্লেষণ এবং তত্ত্ব এবং ওই ঘটনার মধ্যেকার সম্পর্কের ভিত্তিতে ধারণার এক ডিল্যুজ-পন্থী ভাষ্য তৈরি করা। এই তত্ত্ব অনেক বেশি স্থিতিশীল। এই তত্ত্বের মধ্যে দুটো ক্রম আছে - এক হচ্ছে রূপক (মেটাফর) অবশ্যই রূপক থাকবে এবং দুই হচ্ছে, ধারণা অবশ্যই ধারণাই থাকবে। এবং এই দুই ক্রমের মধ্যেকার সম্পর্কটা প্রতীকী। এই ধরনের তত্ত্বচিন্তায় দেখা গেছে ভান ওরফে সিমুলেশনও পরিবর্তিত হয়ে গেছে তার চেয়েও চরম এক অপার্থিব হয়ে ওঠার প্রক্রিয়ায় (extreme process of virtualization)। সেই কারণে, তিনি বলছেন যে আমরা যেহেতু প্রতীক বিনিময়ের বিশ্বকে (ওয়ার্লড অফ সিমবলিক এক্সচেঞ্জ) আর বয়ে নিয়ে বেড়াতে পারছি না সেহেতু আমাদের বুঝে নিতে হবে অপার্থিব বাস্তব (ভার্চুয়াল রিয়েলিটি) প্রকল্পটি আসলে মানব-প্রজাতির এক আত্মহত্যার প্রকল্প। এই হতাশা থেকেই আমার নতুন পথে যাত্রা শুরু। আমার প্রকল্পের সার হল: নতুন করে সংকেতভাষ্য নির্মাণ ক'রে - সংকেতকে তার নিজের জায়গায় পুনঃপ্রতিষ্ঠিত করা।

এই নতুন পথে পৌঁছবার আগে আমি একবার বদ্রিয়ারের 'দ্য ইন্টেলিজেন্স অফ ইভিল অ্যান্ড দ্য লিসুডিটি প্যাক্ট' (২০০৫) বইয়ে যে সংকেতের হত্যা (দ্য মার্ডার অফ দ্য সাইন) বিষয়ক আলোচনা আছে - সেটার দিকে তাকাতে চাই। ওই অধ্যায়ের শুরুতেই বদ্রিয়ার প্রশ্ন তুলেছেন। আমরা বাস্তব পৃথিবীটা ধ্বংস করে দিয়েছি। তাহলে কোন পৃথিবী অবশিষ্ট আছে? সংকেতের বিশ্ব? উত্তরও এক-কথায় নিজেই দিয়েছেন, একেবারেই না। তারপর পরপর দুটো লাইনে বলছেন: We have put paid to the real world and, in the process, done away with

that of the sign. এবং It is the murder of the sign that paves the way for Integral Reality. এই সমন্বিত বাস্তবেরই কথা দিয়েই আমরা কথা শুরু করেছিলাম। এমনি বাস্তব কী? সংকেত, ছাপ (ইমেজ) এবং প্রতিমূর্তির (সিম্যুলাক্রম = Simulacrum) আধিপত্যের কাছে নতি স্বীকার করে এমনি বাস্তব। এখনকার দিনে, আমরা বাস্তবকে হারিয়েছি মানেই হচ্ছে ওই সব কৌশলগুলোকেও (সংকেত, ছাপ এবং প্রতিমূর্তি সৃষ্টি করা ও তার সঙ্গে বোঝাপড়ার কৌশল) হারিয়েছি। অবশিষ্ট রয়েছে কেবল চরম বাস্তব (absolute reality)। এখানে সিম্যুলাক্রম নিয়ে দু-কথা বুঝিয়ে বলা দরকার। সিম্যুলাক্রম হচ্ছে - প্রথমত, কোনো ব্যক্তি বা বস্তুর অবিকল (নকল?) উপস্থাপন। না, বদ্রিয়ার বলছেন সিম্যুলাক্রম নকল নয়। বরং অতিমাত্রায় আসল। বদ্রিয়ার চার-রকম উপস্থাপন দেখতে পান: (ক) বাস্তবের প্রাথমিক প্রতিফলন, (খ) বাস্তবের বিকৃতি, (গ) বাস্তবকে সত্য হিসেবে ধরে নেওয়া, আসলে বাস্তব যাই হোক না কেন, আর (ঘ) প্রতিমূর্তি বা সিম্যুলাক্রম। এই প্রতিমূর্তি বাস্তবের কোনো সম্পর্ককে বহন করে চলে না। অথচ সে কখনো সত্যও গোপন করে না। বরং প্রতিমূর্তি নিজেই এমন এক সত্য যা শূন্যতাকে (আর কিছু বাকি নেই - এমন অবস্থাকে) গোপন করে। বদ্রিয়ার বলছেন, অপার্থিব বা ভার্চুয়াল আর ডিজিটালের দিগন্তে নক্ষত্রপুঞ্জের মতো সংকেতপুঞ্জ অপসৃত হয়ে ক্রমেই কঠোর বাস্তব প্রকট হয়ে উঠছে। তাহলে মানুষে-মানুষে আদান প্রদান কীভাবে সম্ভব হবে যদি মূল্যবোধের উৎকর্ষ না থাকে, ভাষা কীভাবে কাজ করবে যদি বিমূর্ত সংকেতেরই উৎকর্ষ না থাকে! এই পৃথিবীতে তো আদি (আসল) আর কৃত্রিম অভিন্ন। এই পৃথিবীতে আর কোনো ঈশ্বর নেই যিনি নিজেকে ঈশ্বর বলে চিনতে পারবেন। এই কৃত্রিম বিশ্বে এক ধরনের নৈতিকতা আছে - সেখানে বিশেষভাবে সুবিধাপ্রাপ্ত এবং অনাদৃত একই সঙ্গে বসবাস করে। যখন একবার আর আদি বলে কিছু থাকল না এবং অপরের কাছে জীবনের এক আলঙ্কারিক মানে থেকে গেল - এই ভেবে যে এই পৃথিবী টেকনিকালি সম্পূর্ণ এক পৃথিবী যেখানে গণতন্ত্রের মানে স্পষ্ট।

তাহলে সংকেতের যে অবাধ বা আর্বিট্রারি প্রকৃতি তার কী হল? এখানে তো সংকেতিত, সংকেতিতই - তার তো কোনো সংকেতক নেই। এই জন্যই বদ্রিয়ার বলছেন, এই অপার্থিব পৃথিবীতে - সংকেতের অবাধত্ব ছাড়া কোনোরকম দ্বান্দিক প্রক্রিয়া, কোনো ভাষা বা কোনো প্রতীকী উপস্থাপন সম্ভব নয়। এই যে যুগ যেখানে সংকেতের আর্থ-রাজনৈতিক ভাষ্যের দিন শেষ - তাকেই ভানসর্বস্বতার সোনালী যুগ বলা হয়। একটা দিন ছিল যেখানে প্রতিমূর্তিগুলো জ্বলজ্যান্ত তেমনই ছিল এবং সে ছিল বাস্তব আর বাস্তবের অন্তর্ধানের খেলা। সেই দিন আর নেই। এখন আবছা হয়ে এসেছে সংকেত ও উপস্থাপন। সেই আবছায়ার মধ্যে একমাত্র সত্য হয়ে দাঁড়িয়ে আছে অপার্থিব বাস্তব।

তাঁর ভাষায় যে বাস্তবের সমগ্র বিশ্ব কেবলমাত্র সেই বিশ্বের সমস্ত চেহারাকে ০ এবং ১-এর দ্বিকাল্পনিক ছকে দেখতে চায়। সংকেতের কাছে একটা দৃশ্য হল একটা উপস্তাপনের দৃশ্য একটা, ভাষার দৃশ্য। সেই দৃশ্যের গঠনে একটা সংকেত আর-একটা সংকেতকে তাদের মানের অতিরিক্ত কিছুতে টেনে আনতে পারে, প্রলুব্ধ করতে পারে। প্রলুব্ধকরণের দ্বৈত প্রকৃতির একদিকে সংকেতক আরেকদিকে সংকেতিত। সেই দৃশ্যের অপসারণ এক ধরনের অশ্লীলতার পথ পরিষ্কার করে। প্রত্যেকটা ঘটনার বাস্তবায়নকে পর্ণগ্রাফিক করে তোলে। অতএব কোনো যৌন-আচরণের সরাসরি প্রদর্শন - সেটা দৃশ্যমান নির্বাহ (ভিজিবল পারফরম্যান্স) হয়ে ওঠে যেখানে কেউ যেন অভিনয় করছে না। কোনো মোহময়তা নেই, কোনো উপস্থাপন নেই, যেখানে দেখা যাচ্ছে শরীরী সংহিতার একটা সমন্বয় -

যা নিশ্চিতভাবেই বাস্তব এবং বাস্তবের চেয়েও বেশিমাত্রায় বাস্তব। তিনি বলছেন: “Videos, interactive screens, multi-media, the Internet, Virtual Reality: interactivity threatens us on all sides. What was once separated is everywhere merged. Distance is everywhere abolished: between the sexes, between opposite poles, between the stage and the auditorium, between the protagonists of the action, between the subject and the object, between the real and its double. (পৃ. ৭৫)” এই হুমকিই আজকের পৃথিবীর সবচেয়ে বড় আতঙ্ক - অথচ যে আতঙ্ক মানুষকে সরাসরি আঘাত করে না। কারণ মানুষ বদ্রিয়ায় ভাষায় ওই অতিবাস্তবকে নিয়ে মশগুল হয়ে থাকে। তার কাছে আঘাতের মানে, আতঙ্কের মানে এখন অন্য। তাকে তার অতিবাস্তব যা তার কাছে প্রদর্শিত করবে তাই-ই তার শিরোধার্য। বদ্রিয়ার পড়ে জানতে পারলাম আমার রচনার শুরুতে উল্লিখিত সমস্যার আসল রূপটা কী - সেটা দেখতে পেলাম, কিন্তু তার সমাধানের কোনো রাস্তা তিনি দেখান নি।

পাঠ্য বা টেক্সটের ক্ষেত্রেও বদ্রিয়ারের বক্তব্য একই। তাঁর মতে কম্পিউটার স্ক্রিনের মতো ভিডিও দৃশ্য সিনেমা, ফটোগ্রাফি বা চিত্রকলার মতো নয়। কম্পিউটার স্ক্রিন মানবিক স্পর্শ-নির্ভর আদান-প্রদানের ক্ষেত্রে একধরনের ক্ষয়, সম্পর্কের একধরনের কেন্দ্রিকতা। আপনি নিজেই সেই ছবির তরল কায়ার ভেতরে প্রবেশ করে তার অংশ হয়ে ওঠেন। সেই ছবিকে পরিমার্জিত করেন। একটা টেক্সট যখন আপনি কম্পিউটার স্ক্রিনে দেখেন তখন সেটা আর টেক্সট থাকে না সেটা একটা ছাপ বা ইমেজ হয়ে যায় - যার সঙ্গে লেখনের আধিভৌতিকতার কোনো সম্পর্ক থাকে না।

এখন মুশকিল হচ্ছে - একটা বিশেষ সময়ে একটা জরুরি ‘প্রশ্ন’ তোলাকেও গুরুত্ব সহকারে দেখতে শিখিয়েছিল জ্ঞানতত্ত্ব। সমাধান দেবার চর্চা পুঁজির বিপ্লবের কালে আসলে নিজের সুবিধেমতো তৈরি করা পথকেই একমাত্র সঠিক পথ বলে মানুষকে বোঝাবার ক্ষেত্রে ব্যবহার করা হতো। তাই অনেকেরই আজকাল সমাধানের ওপর আস্থা নেই। কিন্তু এই আজকালকার চর্চায়, বিশেষত যান্ত্রিক গণতন্ত্রে, বা পজিটিভ বিজ্ঞানের আদর্শে থিতু থাকা পত্রিকা ওই রকম একটা পন্থা অবলম্বন করার কথা আলোচিত হয়। পশ্চিমের ওই পত্রিকাগুলোর অবশ্য অন্য সমস্যাও আছে। ওই বড় বড় পত্রিকাগুলো - যেগুলো নাকি ইমপ্যাক্ট ফ্যাক্টরের নিরিখে বিচার্য হয় সেগুলোর প্রত্যেকটার নিজ নিজ ঔপনিবেশিক পরিসর রয়েছে। সেখানে তারা ভাষা দিয়ে এবং পদ্ধতিতত্ত্বকে হাতিয়ার করে উপনিবেশবাদ চালিয়ে যায়। কিন্তু আমাদের বর্তমান সমস্যাকে বোঝাতে বদ্রিয়ারকে ডাকতে হল এই কারণে যে - তিনি চোখে আঙুল দিয়ে যুগের লক্ষণগুলোকে চিনিয়ে দিতে পেরেছেন। সেখানেও একটা মুশকিল আছে। বিশেষত যেহেতু আমার কাজ মানবিকবিদ্যা বা হিউম্যানিটিজ নিয়ে। একটা নয় মুশকিলের দুটো দিক। এক হচ্ছে, যদি ক্ষেত্র গবেষণার ভিত্তিকে আমি আমার বক্তব্যকে প্রতিষ্ঠিত করবার চেষ্টা করি, তাহলে আমার বক্তব্যের বা যাকে মহিমান্বিত করে বলা যায় আমার প্রতিপাদ্যের সপক্ষে যুক্তি সংগ্রহ করা প্রায় অসম্ভব। কেননা, যে-কোনো মানুষের কাছে গিয়ে জিগেস করুন - তারা কেউই এই ধরনের সত্তাগত সমস্যার কথা বলবেন না। বলবেন, টুকরো টুকরো, খণ্ড খণ্ড সমস্যার কথা। যেমন, ধরুন কেউ বলবেন, ইলেক্ট্রিসিটির সমস্যা, কেউ বলবেন আমাদের রাজ্যে এই হচ্ছে না, সেই হচ্ছে না আর অমুক রাজ্যে হচ্ছে। ওরা যদি পারে আমরা পারব না কেন? সব দালালি বুঝলেন না?

ইত্যাদি। এইসমস্ত সমস্যা ওই বদ্রিয়ার-কথিত অতিবাস্তবের উপাদান। যে অতিবাস্তব আসলে বাস্তবেরও আর-এক কাঠি বাড়া।

সবই হল, কেবল বোঝা গেল না সংকেততত্ত্বের কাজটা এখন কীভাবে এগোবে! এই অপার্থিব বাস্তবের ভাষিক উপাদানগুলোকে আমি অস্তিত্ব-নির্ভর বাস্তবের ভাষিক উপাদানের সঙ্গে কায়াগত ভাবেও এক বলছি, আবার বলছি তাদের বৃত্তিগুলোও এক, অথচ বলছি তার সত্তাগত পরিবর্তনের কথা। কারণ অপার্থিব বাস্তব তার ভাষিক উপাদানগুলো সংগ্রহ করে অস্তিত্ব-নির্ভর বাস্তবের প্রতিগ্রহী সম্পর্কগুলোর ভেতর থেকেই - এবং সেগুলোকে ব্যবহার সেই অস্তিত্ব-নির্ভর ভাষার একই আকারণে বিগ্রহী সমতলে। "সংকেত"-এর যে বিবর্তন এবং অবলুপ্তি আমরা সোস্যুর থেকে বার্ত হয়ে বদ্রিয়ারে এসে পেয়েছি - তা প্রতি ক্ষেত্রেই - ভাষার অস্তিত্ব-নির্ভর চেহারা ও কাজের ভিত্তিতেই পেয়েছি। এখন ধরা যাক, আমি যে "ভুয়ো বার্তা"-র দৃষ্টান্ত দিয়েছি বা সোশ্যাল মিডিয়ায় পরিবেশিত "সত্যি" তথ্যগুলোর কথা বলেছি, এবং মেনে নিয়েছি - সেসব ভাষিক উপাদানের আর "উপস্থাপন" বলে কিছু নেই, সেগুলো নিজেরাই এখন আক্ষরিক বাস্তব - সেসব ক্ষেত্রে কেবলমাত্র সংকেতের এন্তেকাল হয়েছে বলে দিলেই তো আমার চলবে না। এ-কথা সত্যি যে, সংকেতের বিবর্তনের যতখানি আমরা বার্তে এসে জানতে পেরেছি - তার সমীকরণ করলে দাঁড়ায়: সংকেতক-সংকেতিতর সম্পর্ক প্রথম থেকেই জটিল। কেননা সংকেতন কেবল নামকরণ নয় এবং সংকেতনকে কেবল "ক" "উচ্চারণ" করলে "ক" (ধারণা বা বস্তু) বোঝায় - এমন একমাত্রিক উপস্থাপনের মধ্যে দিয়ে জানা যায় না। পার্সের উপকল্প অনুযায়ী একাধিক মনুষ্য-সংযোগের যে উপসর্গ সংকেতনের মধ্যে রয়েছে - যে-সংযোগের ফলে সংকেত থেকে মানে উৎপন্ন হয় - সেই সংযোগ এবং সংযোগের পরিস্থিতি অর্থাৎ কনটেক্সটের সাপেক্ষে সংকেতন প্রক্রিয়া এমনিতেই এক জটিল প্রক্রিয়া। তার ওপর বার্তের মিথে এসে জানলাম - সেই জটিল প্রক্রিয়ার কেবলমাত্র একটা স্তর নয়। সংকেতনের এক স্তর থেকে অন্য স্তরে মানুষ যাতায়াত করে উদ্বৃত্ত মানের সন্ধানে। এবং সেই উদ্বৃত্ত মানে অন্যান্য সাংস্কৃতিক প্রক্রিয়ার বিবর্তনের সাপেক্ষে হাতে আসতে শুরু করে। মধ্যিখানে বেশ ক-বছর কেটে গেছে। বদ্রিয়ারের মতো যাঁরা খেয়াল করতে শুরু করেছিলেন, এতকিছু সত্ত্বেও গলদটা থেকে যাচ্ছে গোড়ায়, অর্থাৎ, এতদিন কেউ খেয়ালই করেন নি যে, সংকেতন প্রক্রিয়ার সূত্র আবিষ্কারের নেশায় আমরা ভুলে গিয়েছিলাম আমরা কোথায় দাঁড়িয়ে কাজটা করছি। বার্তই প্রথম সংস্কৃতিতে মানুষের অবস্থানের কথাটা খেয়াল করিয়ে দিয়েছিলেন তা নয় তারও আগে য়্যুরি লৎমান সাংস্কৃতিক প্রক্রিয়ার দিকে তাকিয়েই সেমিওস্ফিয়ারের কথা বলেছিলেন।

কিন্তু সংস্কৃতি নিজে তো একটা আকার মাত্র। তার ভেতরে যে-সমস্ত কাজকর্ম চলে সেগুলো বিশ্বজনীন আকরণ মেনে। কিন্তু বাস্তবেরও একটা কায়া বা চেহারাগত দিক আছে। সেটা হচ্ছে অস্তিত্বশীল বাস্তব। এখন সেই চেহারাটা যদি সম্পূর্ণ পালটে যায়, তবে সংকেততত্ত্বও পালটে যাবে - তার সাজ-সরঞ্জামও পালটাবে। কিন্তু যদি অস্তিত্বশীল বাস্তবের "ভান" করে আরেক ধরনের বাস্তব অর্থাৎ যাকে এই রচনায় অপার্থিব বাস্তব বলেছি সেটা কাজ করতে থাকে - যেখানে পুরোনো রীতির ছায়া, কায়া ও আকার তিনটেই অবশিষ্ট আছে - অথচ সে সাবেকী মানে উৎপাদন প্রক্রিয়ার বাইরে গিয়ে কাজ করতে শুরু করেছে - এমন হয়, তখন সংকেততত্ত্বের কাজ কী হবে? এই হতাশাই ব্যক্ত করেছেন বদ্রিয়ার। এবং ঘোষণা করেছেন সংকেতের মৃত্যু। আমি এই অপার্থিব বাস্তবের বিশ্লেষণের ক্ষেত্রে

তাঁর ভাবনার সূত্র ব্যবহার করলেও - সংকেত মারা গিয়েছে একথা মেনে নিয়ে হাতগুটিয়ে বসে থাকতে পারব না। যদি তাঁর কথা সত্যিও হত, তাহলেও মৃত সংকেতকে পুনরুদ্ধারের কাজে হাত লাগাতাম।

তবে আমি বিশ্বাস করি - এবং তার সপক্ষে প্রমাণও দিয়েছি যে সংকেত মারা যায় নি। অস্তিত্বশীল বাস্তবের প্রেক্ষিতে গড়ে ওঠা সংস্কৃতির ছেঁড়া টুকরোগুলো এদিক-সেদিক ছিটকে পড়ে আছে। বিচ্ছিন্ন, বিক্ষিপ্ত ও ইতঃস্তত। একটা ব্যাপার মনে রাখতে হবে - অপার্থিব বাস্তব যেহেতু সম্পূর্ণ ভিন্ন কোনো চেহারা গ্রহণ না করে অস্তিত্ব-নির্ভর বাস্তবের কায়া-রূপের ভান করে, তারই পুরোনো আকারণের ভিত্তিতে কাজ করে, ফলে সেও ভুল পদক্ষেপ নিতে বাধ্য। আমাদের প্রথম কাজ হল - তার ভুল পদক্ষেপের জন্য ওৎ পেতে অপেক্ষা করা। আর দ্বিতীয় এবং তাৎক্ষণিক কাজ হল, অস্তিত্ব-নির্ভর বাস্তবের সঙ্গে এখনও অটুট যোগ রয়েছে সংস্কৃতির যে ছেঁড়া টুকরোগুলো - তার সঙ্গে অপার্থিব বাস্তবের মানে তৈরির প্রক্রিয়ার তুলনা করে দেখানো - প্রতিগ্রহী সম্পর্কের মধ্যে থেকে সঠিক উপাদান "চয়ন" করার ক্ষেত্রে অস্তিত্ব-নির্ভর বাস্তব আর অপার্থিব বাস্তবের কোথায় মিল আর কোথায় অমিল। প্রতি পদে একটাই কথা মনে রাখতে হবে, "ভান" করা মানে বিকল্প ব্যবস্থা গ্রহণ করা নয়। সুতরাং আরও বেশি মনোযোগ সহকারে, খুঁটিয়ে পরীক্ষা করা দরকার - অতীত থেকে বর্তমানে সংক্রমিত হওয়া সংস্কৃতির ভেতরে ভুঁইফোড় অপার্থিব বাস্তবের সংক্রমণের প্রধান লক্ষ্যবস্তুগুলোকে। অর্থাৎ আমাদের ভাবতে হবে একই সঙ্গে সংকেতনের প্রাথমিক, মাধ্যমিক ও অতিবাস্তবিক সূত্রগুলোকে: (ক) নামকরণ: সংকেতক-সংকেতিতর আদি সম্পর্ক এখনও ব্যবহার করে অপার্থিব বাস্তব। সেখানে সংকেতকের কাজ কমে গেছে ঠিকই কিন্তু সংকেতিতর বৈচিত্র্য বেড়েছে। কিন্তু সেখানে সবচেয়ে বড় সমস্যা ঘটেছে বিষয়ীকে নিয়ে। অর্থাৎ সংকেতনে মনুষ্য-সংযোগের প্রকৃতিগত পরিবর্তন ঘটেছে। (খ) মিথের প্রকল্পকেও অস্বীকার করতে পারে নি অপার্থিব বাস্তব। কেবল, দ্রষ্টার অবস্থানটাকে মুছে দেবার চেষ্টা করেছে। যাতে তার "ভান"-এর প্রকল্পকে বিষয়ী মিথের সরঞ্জাম ব্যবহার করে ধরে না-ফেলতে পারে। (গ) সংকেতক-সংকেতিত-বিষয়ী - এই অস্তিত্ব-নির্ভর আদি-বৌদ্ধিক প্রাথমিক ত্রিভুজের ভেতরে কৃত্রিম বুদ্ধিমত্তার সাহায্যে "অপর" এক মাধ্যমিক বিষয়ীর জন্ম দিয়েছে। যার ফলশ্রুতিরূপে - কৃত্রিম-অকৃত্রিম বিষয়ীর মধ্যে টানাপোরেনে মনে হচ্ছে - "এইটাই বাস্তব", তা আসলে বদ্রিয়ার কথিত অতিবাস্তব। এখনকার সংকেততত্ত্বকে তাই একই সঙ্গে দু-রকম সংক্রমণের ইতিহাস নিয়েই কাজ করতে হবে। আমার স্থির বিশ্বাস সংকেততত্ত্ব সেই কাজে সফল হবেই।

আমি যখন বদ্রিয়ার পাঠ করি নি তখন এই বাস্তবকে খানিকটা এইভাবেই বলার চেষ্টা করেছিলাম। এখন বদ্রিয়ার পাঠের পর আমার বক্তব্যের সেই সংস্করণকে ঈষৎ পরিমার্জন করে পুনঃপ্রতিষ্ঠা করা দরকার। এই বাস্তবটা আমার চারপাশের জগত। সংকেতকে খুন করে মানুষের এই আটপৌরে বাস্তবকে যে অতিবাস্তবে পরিণত করছে - সে অপার্থিব বাস্তব বা ভার্চুয়াল রিয়েলিটি আমি যে কারকের নাম দিয়েছি কৃত্রিম বুদ্ধিমত্তার যুগ। কিন্তু বদ্রিয়ারের ভাষ্য একটু বেশি মাত্রায় ভাবুক। সেখানে অপার্থিব বাস্তব উপন্যাসের চরিত্রের মতো। এবং যে চরিত্র আসলে ভিলেন - এবং অন্যের হতাশার কারক। আমি সে-দিক দিয়ে একটু বেশি আশাবাদী। আমি আজও ডায়োজিনিসের মতো লণ্ঠন হাতে ঘুরে বেড়াচ্ছি সমাধানসূত্রের খোঁজে। এইভাবে এই অতিবাস্তব অবস্থাকে 'চরম' বলে মেনে আমি নেব না। আমি বদ্রিয়ারের ভাষ্য থেকেই উদ্বুদ্ধ হয়েছি, যে-সংকেতকে খুন করে সমাধিস্থ করা হয়েছে (যদি সংকেতের মৃত্যুকে মেনেও নিই) তাকে মাটি খুঁড়ে বের করাটাই হবে আমার একমাত্র কাজ। ফিরিয়ে আনতে হবে চর্চাকে।

মানুষের ভেতরে আবার খেলা করবে "শ্রাবণের ধারার মতো"-র কোনো অভিব্যক্তি। এই চর্চাকে ফিরিয়ে আনতে গেলে, চিনতে হবে ঠিক যে-বাস্তবে সংকেতগুলোকে সমাধিস্থ করা হয়েছে তার চরিত্রকে। এই প্রয়াস সেই বোঝারই সংক্ষিপ্ত প্রয়াসমাত্র।

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